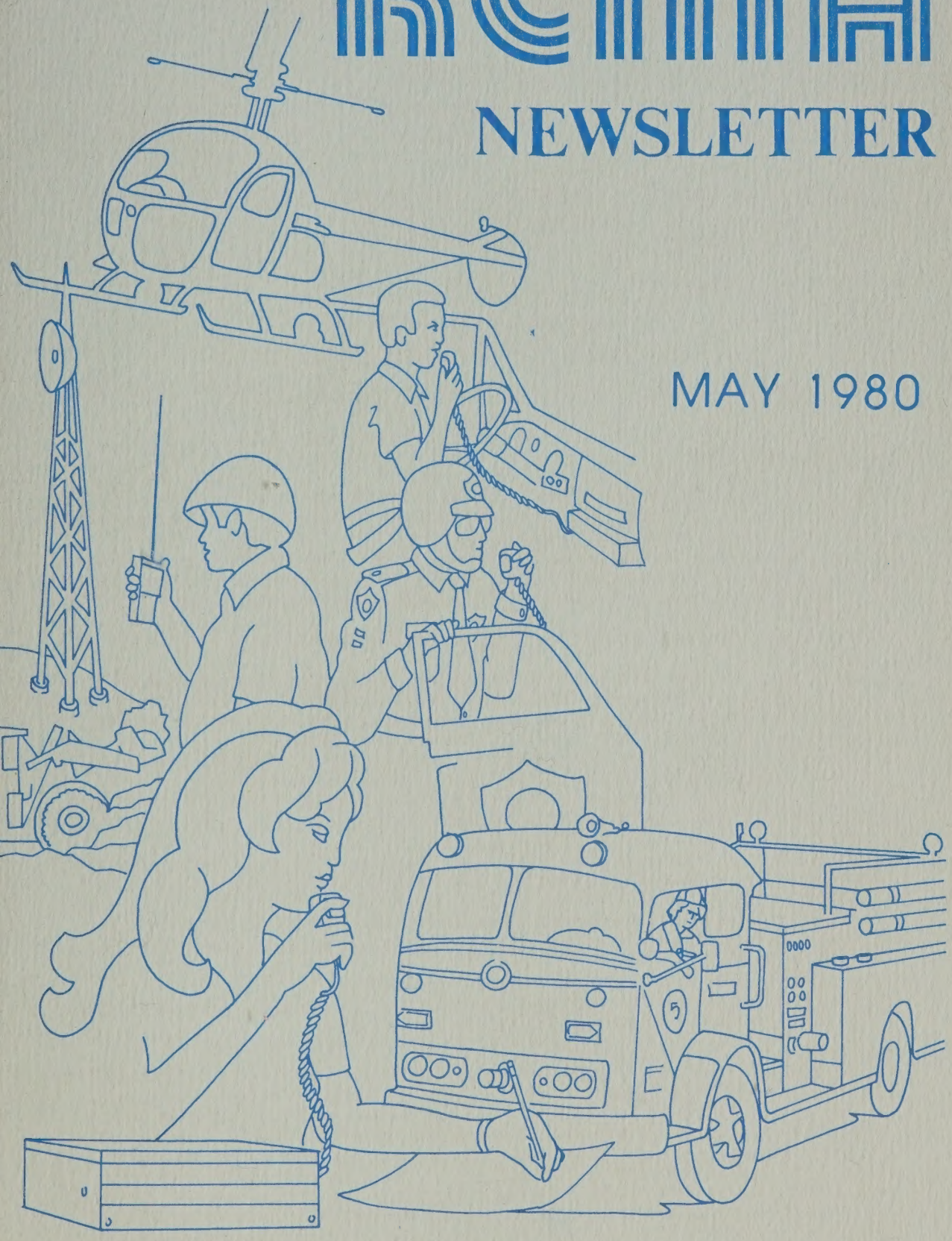
RCMA

NEWSLETTER



MAY 1980

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OF MONITOR RADIO LISTENERS

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RCMA NEWSLETTER

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FOR YOUR INFORMATION

1. All club business, unless otherwise noted, must be addressed to: RCMA, P.O. Box 4563, Anaheim, CA 92803. This includes matters that relate to renewals, changes of address, Newsletter delivery problems, etc.
2. Input to the RCMA Newsletter must be mailed to the proper editors whose addresses are included in the individual column headings. If no particular column seems to be appropriate, send it to: RCMA, P.O. Box 4563, Anaheim, CA 92803 and mark the envelope "For Newsletter".
3. RCMA Newsletter back issues (reprints) are not presently being offered for sale to members.
4. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address in the upper left corner. Put this and your instructions for remailing in another envelope and mail to: RCMA, P.O. Box 408, Earp, CA 92242.
5. It would be appreciated if you would include your RCMA membership number with all correspondence to the Newsletter Editors or to Headquarters.
6. If you require a reply when writing to RCMA Headquarters or one of the Editors, you MUST include a self-addressed stamped envelope.
7. Please write only on one side of the paper.
8. Please do not combine in one letter items that should go to different addresses.
9. If you are inclined to type what you submit to the Newsletter, please do not exceed a 7-inch column width and please single-space. Doing this may save an editor from having to retype the material. Please do not use "*script*" type.
10. Your RCMA membership number and expiration date appear on your Newsletter mailing label.
11. You may join or renew for only one year at a time.
12. The "RCMA Newsletter" accepts paid advertising. If you would like to place a paid ad, please write for our advertising guidelines.

The RCMA Newsletter is published monthly by the members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $10.50 per year for U.S. residents and $12.85 (payable in U.S. funds) for persons in all other countries (dues subject to change). Information contained herein is primarily obtained from members and does not necessarily present the position or reflect the opinion of the RCMA as a whole. The RCMA Newsletter editors and officers are not responsible for the accuracy or validity of information contained herein. RCMA does not necessarily recommend or endorse products or services advertised herein. This publication is Copyrighted © . Reproduction of any material in this Newsletter is prohibited without prior written permission.

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** Calendar **

Send notices of upcoming events for the Calendar section to John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803. Please send notices well in advance of the Newsletter deadline.

April 14 MONDAY deadline for newsletter. June dated issue.

April 18 FRIDAY General meeting and Tour of Los Angeles Fire Control Center 200 N Broadway, Los Angeles.

May 6 TUESDAY Board meeting and newsletter labeling at Anaheim Library Branch 1349 S. Euclid. Board meeting 6:PM Labeling 7:PM. This is an opportunity to have your voice heard, assist the club, and catch up on the latest scanner activity. All members are welcome. Any DX members in the area on vacation. Here is a good spot to break the trip. We can use all the help we can get.

May 16 FRIDAY General meeting at Mercury Savings and Loan, Valley View and Lincoln Ave, Buena Park, Ca. Guest speaker not confirmed.

May 19 MONDAY deadline for newsletter. July dated issue.

June 11 WEDNESDAY Board meeting and newsletter labeling at Anaheim Library

June 20 FRIDAY General meeting. Location and agenda open

July 18-19-20 Combined general meeting with ANARC. University of Calif, Irvine.

August 16 SATURDAY MOUNTAIN TOPPING tour with Karl CAOR022 and Denny CAOR004 Every one knows the higher the antenna the better the reception. This is the opportunity to go for some line of sight DXing with two experts.

Sepetmber 19 FRIDAY General meeting at Mercury Savings and Loan, Valley View and Lincoln Ave, Buena Park, Ca. This is to be one of our Sharing Sessions. Everyone is encouraged to bring something to share with the others.

October 17 FRIDAY General Meeting and a tour of KOCE Channel 50 TV satellite facility.

November 21 FRIDAY General Meeting. Gordon West CAOR017 noted west coast editor and Larry Guy of the FCC tentatively scheduled.

Reports of Meetings and Officers

Send reports (informal accounts) of RCMA meetings, gatherings, etc. which have occured to: John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.

TREASURER'S REPORT
For Period Ending February 29, 1980

Balance as of January 31, 1980		**$ 1173.96**
Received:		
For membership;		
New members (104)	$ 925.40	
Renewals (70)	575.00	
Back issues	33.50	
Sample newsletter	1.50	
Directory	50.00	
Advertising	25.00	+ 1610.40
Expenses:		
Refund for 1st class postage	$ 10.00	
Noel Robertson (President)	96.85	
Iden & Linda Rogers (Newsletter Editor, 2nd VP & Treasurer)	52.07	
Postmaster (Bulk mailing)	120.00	
Bill Ell (Secretary)	75.00	- 353.92
	Balance	**$ 2430.44**

ATTENTION CHICAGO AREA MEMBERS!

SOME CHICAGO AREA MEMBERS ARE MAKING SERIOUS PLANS TO START A CHICAGO AREA CHAPTER WITH REGULAR MEETINGS ---- DISCUSSIONS, INFORMATION EXCHANGES, GUEST SPEAKERS, COMMUNICATIONS FACILITY TOURS, ETC, ETC. IF YOU LIVE IN THE AREA AND ARE INTERESTED IN INFORMATION ABOUT THE CHICAGO AREA CHPATER, SEND A BUSINESS-SIZE SELF-ADDRESSED STAMPED ENVELOPE TO: ED SIROVY, 311 S. WILLIAMS ST., WESTMONT, IL 60559.

RCMA MEETINGS IN OTHER AREAS

Members in any area may hold their own meetings to exchange info or whatever. It does take some organizing but the efforts can be quite rewarding. If you want to explore the idea of having an occasional, quarterly or monthly meeting in your area, a good place to start is in the Contact/Info Wanted column.

All that is required if meetings are held is that the meeting notices be submitted to the Newsletter "Calendar" well ahead of time for publication and that an informal, brief account of the meetings be written up (typed, 7 inch column width) each time and submitted to the "Reports of Meetings and Officers" section of the Newsletter.

the editor's column

EDITOR WANTED! RCMA, P.O. Box 4563, Anaheim, CA 92803.

EDITOR AND ASSISTANT EDITOR WANTED

If you are interested in being the RCMA Newsletter Editor or Assistant Editor and preferably if you live in Orange Co., California, please contact, Iden Rogers, RCMA, P.O. Box 4693, Riverside, CA 92514, (714)-688-1168 before 8:30 PM Pacific Time.

MEMBER PARTICIPATION

The RCMA Newsletter is composed mostly of input sent in by members. Without information, stories, product reviews, etc. from members, there could be no Newsletter. Several columns are not well supported by contributions from members even though most members like to read the columns.

If you have any items you would like to see printed, items that you feel would be of interest to other members, please consider writing them up neatly and sending them to the proper editor.

The Newsletter column editors do not get paid for being editors, in fact they lose money, money which is spent for postage, envelopes, photocopies, phone calls, etc. The column editors enjoy their work or they would not do it. If they do not receive much input from members it becomes very discouraging for them. They take pride in their work and the better they make their columns, the better they feel. Their personal satisfaction is the "pay" they receive. Please help "pay" our editors by taking a little time to send in some information to one or more of the column editors. Right in each column heading it explains the particular type of information each editor is looking for plus the address where to send it. IBR

SOCIABLE MEMBERS DIRECTORY

As of the first week of March, all the returned directory questionnaires were entered into a computer for sorting and printing. From there it will be photocopied or printed by offset. Those of you who chose to be listed in the directory should have your copies by now. If not, you should have them very soon.

Any future editions of the RCMA Sociable Members Directory will be announced in the Newsletter so please do not inquire. If you are a new member and have not read about our directory, it is simply a directory of all members in the club who actively wish to meet or correspond with other members. Only members who are listed will receive a copy. IBR

MONITORING AND COMPUTERS

The effects and benefits of computers are becoming more and more apparent and important in our lives. The time is now here when many people have their own computers. Home computers and monitoring can go hand in hand and can be especially helpful in our hobby for record keeping. Active radio hobbyists seem to generate loads of paperwork and much of this information can be stored in and retrieved from home computers. Some technically oriented hobbyists may actually have conquered the home computer/monitor interface where the computer actually runs the monitor by wires connected to it. The big question for us is --- Are there enough RCMA members who have and who use home computers to warrant a new column entitled "Monitoring and Computers"? There are two general categories of information that the column could include: 1) software - that is, schemes of record keeping and record manipulation and the step by step instructions on how to tell your computer to do the job and 2) hardware - the actual internal electronic workings of the computer and possible interfaces with synthesized scanners.

Such a column as "Monitoring and Computers" could not exist without a continual input from members who actually use home computers, so before this column can get under way I would like all interested members who have home computers to write to me (RCMA, P.O. Box 4693, Riverside, CA 92514) to tell me what computer you have, what you can make it do relating to monitoring, what you would like to see in such a column, and perhaps what you might be able to send into the column from time to time. If response is sufficient, I will start the new column BUT it will need an editor or perhaps two (software and hardware). So if that interests you, let me know. It's now up to you.

I.B.R.

FREQUENCY LOOK-UP SERVICE

Radio Research Group, P.O. Box 7999, Statesboro, GA 30458, was mentioned several issues ago for information. A letter was recently received from them tnat clarifies the service that they will provide. If a member supplies a callsign, they will supply license information. Each listing costs $2 and is available only to hobbyists, not to commercial users. Other research is at a $50 per hour rate.

No members have yet written to the editor to describe the quality or promptness of service. No letter sent to me from RRG has been signed by a named individual. I don't know if this is any reflection on the integrity of the company or not. IBR

ATTENTION TECHNICIAN MEMBERS

Mike (MO-002) has what I believe to be a good idea. He writes, "It would be nice if a technician-member would step forth and place a paid ad, requesting business from members for repair work on monitors, commercial gear, etc. With repair prices skyhigh, someone could make a fortune repairing our stuff." It would also be desirable for the person/company to be very competent, reliable and prompt but this might be too much to hope for.

Are there any qualified, reliable technician types out there who would like to advertise in the RCMA Newsletter to offer scanner repairs? If so, write for our advertising guidelines. Remember, if you do advertise a repair business, tne quality of your work will no doubt be reported by members and written up in tne Newsletter. It could be a great opportunity for the right person or company to make some money while providing a valuable service to members. I.B.R.

COMMUNICATIONS ELECTRONICS, Hmmm!

The following article appeared in the Riverside Press-Enterprise (Riverside, California) on Sunday, February 24, 1980, and we may reprint the article provided it is unedited and credit given to the source. It was submitted by Mike (CA-RI-011) and the info contained herein could be of interest to members.

In October, I called Communications Electronics of Ann Arbor, Mich., to place an order for two Bearcat scanners and some accessories. The entire order cost $417, which I paid through Master Charge.

I received an invoice noting that the Bearcat 4-6 and accessories were back-ordered. In November, the Bearcat 220 arrived.

Several subsequent calls revealed that the undelivered items were "waiting for crystal cards." Each time, I was told they would be shipped within a week, but no merchandise ever arrived.

In January, a company representative said I would have to reorder and asked for my Master Charge number. I told him the equipment was already paid for, but he said he couldn't authorize sending it without further payment.

I decided to send complaints to every available source, including action lines and trade organizations. I also contacted the bank handling my Master Charge account and magazines that carried the company advertising.

I even talked with the Electra Co., which manufactures the scanners. The firm reported it doesn't sell to Communications Electronics any more because of problems which arose.

How do I get action? — J.B.

You have received all of the equipment from Communications Electronics. Your aggressiveness apparently paid off.

Most complaint-handling organizations recommend persistence, such as yours, as the best way to get results.

Kenneth Ascher of Communications Electronics claimed that the confusion was caused by incorrect coding of your order. Your scanners, which are radios receptive to police radio, UHF, VHF and other transmissions, were coded to be shipped together rather than separately as they were shipped, he said.

The Detroit Better Business Bureau reports that it received so many inquiries about Communications Electronic that it sent the firm a questionnaire last December. The company has not returned the questionnaire or resolved all the complaints.

Those who encounter similar problems and who cannot get results despite great persistence may be aided by three new publications.

The latest edition of "EM Complaint Directory for Consumers," produced by Everybody's Money, Box 431B, Madison, Wis. 53701, is available for $2.

It lists company names, addresses and officers, and government and consumer agencies that can be of help. The booklet also gives advice on how to complain effectively.

"Consumer's Resource Handbook" is published by the White House Consumer Affairs Office, and can be obtained free from the Consumer Information Center, Dept. 532G, Pueblo, Colo. 81009.

This publication also suggests how to get action on problems. It has complete lists of federal and state consumer offices.

"Help: The Indispensable Almanac of Consumer Information 1980" not only lists sources of help in government and business but discusses consumer rights and programs of assistance.

This 587-page book can be obtained for $8.95 plus $1 mailing charges from Consumer News Inc., 813 National Press Building, Washington, D.C. 20045.

LOW BAND SKIP

Mark S. Lucas
Editor

Send reception reports relating to distant stations received in the 30-50 MHz band plus any Low Band DXing tips, comments or articles to: Mark S. Lucas, 724 E. Mulberry St., Lancaster, OH 43130. If you need a Low Band skip reception report form, send an SASE with your request.

Welcome to another month of skip! I've got reports of confirmations from past columns (which is an important part of this column!) After all if you get "stumped" by a station you've received,it might be in some one else's backyard. So I DO very much rely on YOUR help in more ways than one,as do the rest of the club!

FROM DON (PA-025):		39.20 MHz	NO CALL OR ID		POLICE
BASE	BC 220	2-20-80	1730 EST	Los Angeles	2600 Miles
		39.82 MHz	NO CALL OR ID		POLICE
BASE	BC 220	2-18-80	1600 EST	Temple,Cal.	2600 Miles

(Editor's Notes: Don merely heard the mention of "Temple" and wasn't sure if this was a correct ID or mention of a LASO substation.)

		33.80 MHz	KGG-80?	NO ID	FIRE
BASE	BC 220	2-18-80	1210 EST	Springtown,TX	1600 Miles
		39.88 MHz	NO CALL OR ID		POLICE
BASE	BC 220	2-18-80	1605 EST	Santa Rosa,Cal.	2600 Miles

FROM A.L. (WASH-013): "For Jay's inquiry: Info from 1956 Official Registry of Radio Systems in Public Safety Services. KGC 522 33.78 MHz in 1956 near Georgetown,Delaware. It might be of interest to note that KGA,KGB, KGC,etc. issued to D.C., Pennsylvania and Delaware."

"For Bill's inquiry: Info from 1957 Official Registry of Radio Systems in Industrial Services. KAC 969 33.18 MHz. Northern Natural Gas Co., Clifton,Kansas"

FROM DAVID (TX-???): " For BILL (CA-LA-009) and CHRIS (CA-OR-050):

37.18 MHz	KKD 525	Huntsville PD,TX
37.18 MHz	KKG 983	Abiline PD, TX
37.26 MHz	KDV 760/ KDV 751/ KKB 846	Kleburg Co., Kingsville, TX."

(Editor's Note: David states that until 1975 as a rule if one heard a station on 37.06, 37.08, 37.10, 37.22, etc. it was a good chance that it was Texas. However with LEAA grants most have gone to VHF-HI using repeaters.)

FROM JOHN (ILL-012): "Additional frequency pair for North Carolina State Patrol not listed in VOL. 6 of 'POLICE CALL.'

BASE-CAR/ CAR-CAR	CAR-BASE
42.50 MHz	42.70 MHz"

FROM JAMES (ILL-060):" I was listening to 40.100 MHz too and heard several stations with RTTY (Radio Teletype). I heard them at 1330 CST and heard IDs as "MNXGN", "MNHOK", and the latter was supposedly located at Denver.

On 2-22-80 at 1338 CST on 34.65 MHz I heard "Alpha 39" sending messages in three letter groups."

FROM GARY (OH-016): "In your column of February Jay in California had a couple reports which he thought were from the Cleveland area. I was able to locate information on the following:

33.90 MHz	KQI 316	Hamilton Co., Cincinnati,Ohio

Cleveland FD also operates on this frequency with a call KQA 216."

Finally, from a member "across the sea." We have this report from LYNN (NY-061): "My best reception was what I think was some kind of delivery service in NYC. I picked them up several occasions, but best was 14 Jan,1980 at 1300 GMT. It was on 31.20 MHz and was getting both base and mobile. If anyone can verify this, I would appreciate this. I will say the accents were American, not British.

A couple others interesting but a bother are on 31.35 MHz, a Spanish or Portuguese pagers,and on 30.10 MHz somebody's North Sea fishing fleet. They probably aren't more than 500 miles from my location.

LOW BAND SKIP (CONTINUED)

For those in the states who want to be adverturous, 31.20 MHz is the RAF Bentwaters (USAF) FD. 31.35 MHz is RAF Woodbridge (USAF) FD, and 30.10 MHz is Bentwaters/ Woodbridge aircraft maintainance net."

We certainly don't get much mail from that distance! If there are any other RCMA members stationed overseas,be it Europe or Asia,etc. I'd like to read what might be heard at your end!

If this column this month looks skimpy for loggings, put the blame on the sun! Skip was nil from December 21 to early February. So now that LASO is back in again daily at MY location, let's hear from Y O U!! And again, I must reiterate that Sporadic-E (Es) is to be watched for very shortly. Don't say I didn't give you advance warning!

To close things up this month, if you happen to be a "Buckeye" and haven't heard about the ALL OHIO SCANNER CLUB (AOSC) you may wish to get information. AOSC was started as a regional club in December 1979 by JERRY (OH-015) and things are starting to happen. You may write to: AOSC, 104 Maplewood, Mt. Vernon, Ohio 43050 for details. I know this really doesn't belong in this space, but hope THE editor won't mind! So until next month, SEND IN YOUR LOGGINGS!

contact/info wanted

The purpose of this column is twofold: 1) CONTACT --- It helps members to contact other members. If you want to meet, telephone or correspond with other members (by letter or cassette tape) in a certain geographic area or with members who have similar listening interests, this is the place to say so. 2) INFO WANTED --- This column helps members to obtain information directly from other members on various subjects related to two-way communications monitoring above 30 MHz.

Members who wish to contact you will do so directly, so be sure to give your phone number and best time to call and/or your address. Write to: Larry H. Brown, 1717 Leith St., Flint, MI 48506.

I would like to correspond with members of the RCMA from any geographical location either by letter or cassette tape on any scanner related subject. Feel free to contact me. DAVID MCLAREN (IL-002), R.R. #2, County Line Rd., Rock Falls, Illinois 61071.

Member would like other member's thoughts about which books to purchase that pertain to monitoring. LARRY STINEMAN (IN-010), 26495 CR 6 E., Elkhart, Indiana 46514.

I would like to correspond with members who have Canadian frequency information they are willing to exchange. I am attempting to compile a listing of Canadian frequencies and presently have some 50 pages of information to exchange. I have been attempting to contact Canadian members individually but I do not have access to the names and addresses of all Canadian members. If you are interested, please forward details and I will return a copy of my current listings. Since there is no Canadian equivalent to Police Call, this is the only way I know of to achieve a similar result. This is a co-operative effort and needs your help. BRUCE RAE (CAN-019), 179 Dumble Avenue, Peterborough, Ontario, Canada K9H 5B3.

Member has just moved to Arkansas and would like any member who has frequency channels and unit numbering information and districts for Arkansas State Troopers and Arkansas Highway Police to contact him. He has unit assignments and codes for LA County Sheriff, California Highway Patrol, LAPD, Orange County Sheriff and city police departments for exchange. JIM ADAMS, P.O. Box 51, Hamburg, Arkansas, 71646.

Several SoCal RCMA "hams" are expressing a desire to form an "RCMA Net" on a local repeater once a week, to share info, stimulate contact between members, and promote RCMA in the ham ranks. If you monitor the 144-148 MHz ham band, and/or are licensed as a ham and would like to listen and participate in a Net, please write or call me with your suggestions for a repeater, day of week, time of day, and ideas for Net content. Suggested repeaters should be between

Contact/Info Wanted (continued)
146-148 MHz, non-PL'd, and have wide coverage (LA and Orange Counties minimum). JEFF HARRIS (CA-OR-73) (KA6IGT) P.O. Box 141, Silverado, California 92676. Weekdays at work (714) 992-0791.

Several southern Florida members have formed the "RCMA Miami group. This is an informal group which was formed to coordinate data for both personal use and RCMA publication. All RCMA members in south Florida are encouraged to join the group and those who include a copy of their personal frequency list (confirmed channels) will receive the latest edition of the Miami Groups' "South Florida area frequency list." Correspondence should be addressed to: RCMA-Miami Group, P.O. Box 630883, Miami, Florida 33163. Please include name, address, phone number, and type of radio used for monitoring. All RCMA members wishing a copy of the 1979 South Florida area Frequency Guide should send a large (legal size) SASE to the above address.

I wish to contact any member in the Philadelphia area with frequencies for Philadelphia fire, police, and highway crews. Would also like frequencies for SEPTA and the PATCO Hi speed line. I would like to receive cassette tapes for Philly fire and police. I will pay for these tapes or swap for Boston area tapes. MARK WOLFGANG, 63 Campbell Ave., Revere, Mass., 02151. (617) 284-6443 evenings.

WANTED: I am looking for the following crystals that fit the Bearcat Thin Scan Hi-Lo VHF model: 45.96, 155.865, 155.940, 156.165, 160.470, and 160.845 MHz. Also looking for Fanon type crystals of 163.8875, 163.925, and 165.2375 MHz. Please call (313) 398-9797 during the following hours: Mon-Fri; 7:30 p.m. to 11:00 p.m. Weekends; 1:00 p.m. to 11:00 p.m. If no answer leave your name and phone number and I will return the call.

WANTED: 1N82A diodes (germ, glass, wire, leads). Name your price. George DuBois, 10048 NE Campaign, Portland, Oregon 97220.

FOR SALE: (1) Regency TME 16 H. 16 channel hi band crystal controlled with built in C O R relay for automatic tape recorder activation and pre amp. Presently aligned on 163-170 MHz range; $95.00. (2) Regency TME 16 H/L. 16 channel crystal controlled with built in C O R for automatic tape recorder activation. Presently aligned on 45 and 155 MHz range: $85.00. (3) UHF aircraft receiver R. 278/6R. 11 channel, 225-399.9 MHz, frequency synthesized in 100 kHz steps, no crystal required. Working with complete manual, weight approx. 150 lbs. $195.00 plus shipping. Bob Coburn (NH-003), RFD 4 - Tinkham Lane, Londonderry, New Hampshire 03053. (603) 432-2615.

MONITORING & THE LAW

Send all articles, references, copies of monitoring laws and questions pertaining to the legal aspects of monitor radio listening to:

Editor needed for this column. If you are interested in monitoring laws, maybe have a modest collection of laws, maybe have some background in law and can type and spell and all that good stuff, please consider volunteering to be editor for the column. We need you. Write to: RCMA, P.O. Box 4693, Riverside, CA 92514.

SATELLITES

Bill Blomgren & John Coker, Editors

Send information about satellite frequencies which you have received with type of traffic heard, orbital data, hobby receiving equipment and antennas and questions pertaining to satellite monitoring to: Bill Blomgren, 505 E. Mulberry, #3, Normal, IL 61761.

The written portion of this month's column will be shorter than usual since we will be including three coverage maps. These maps are intended to give you a better idea of what areas are covered by the satellite systems we have been discussing over the past few months. All three maps represent approximate coverage areas and you may find that your reception may not always conform to the areas represented on the maps.

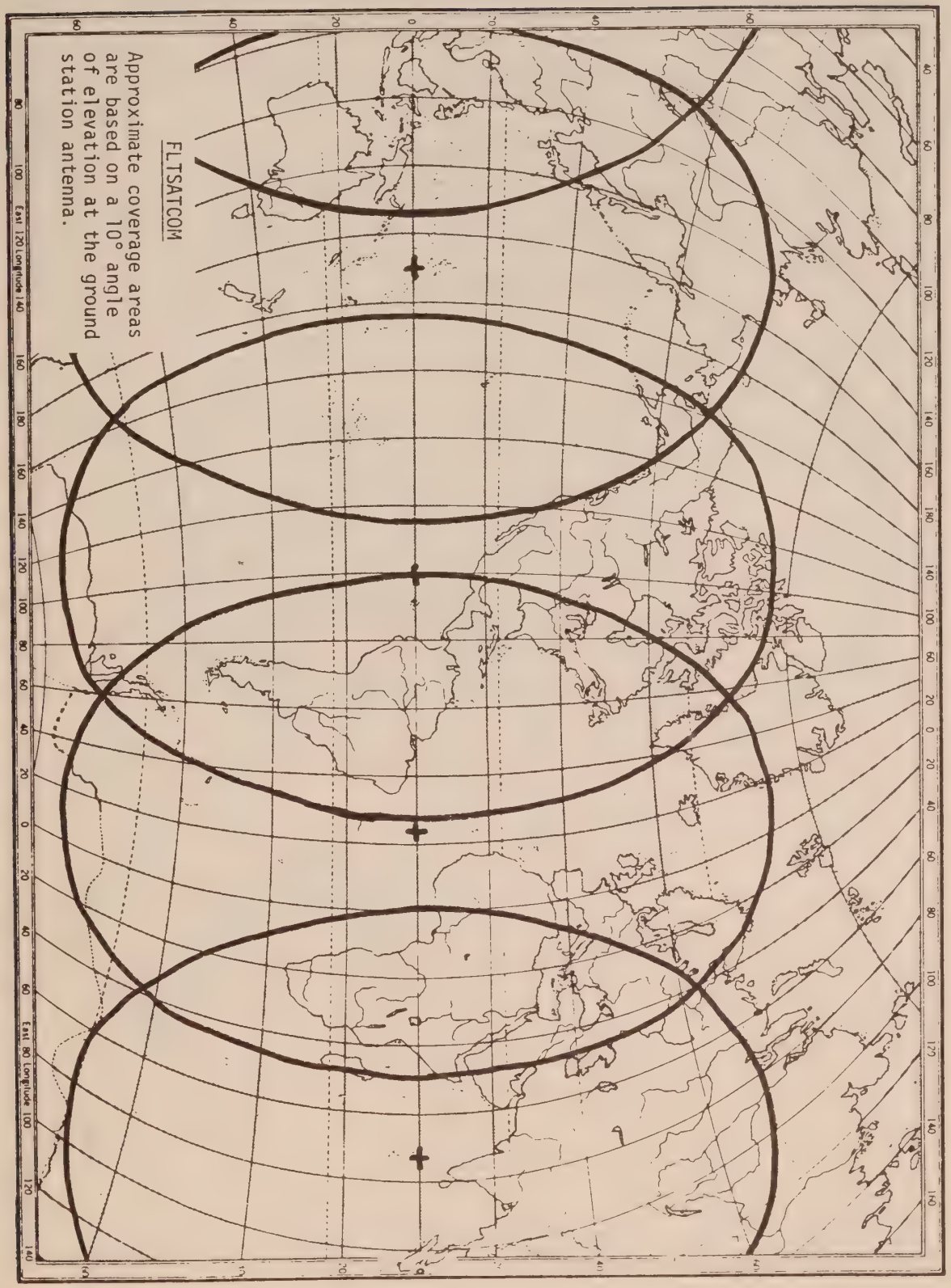
SATELLITE LOCATIONS

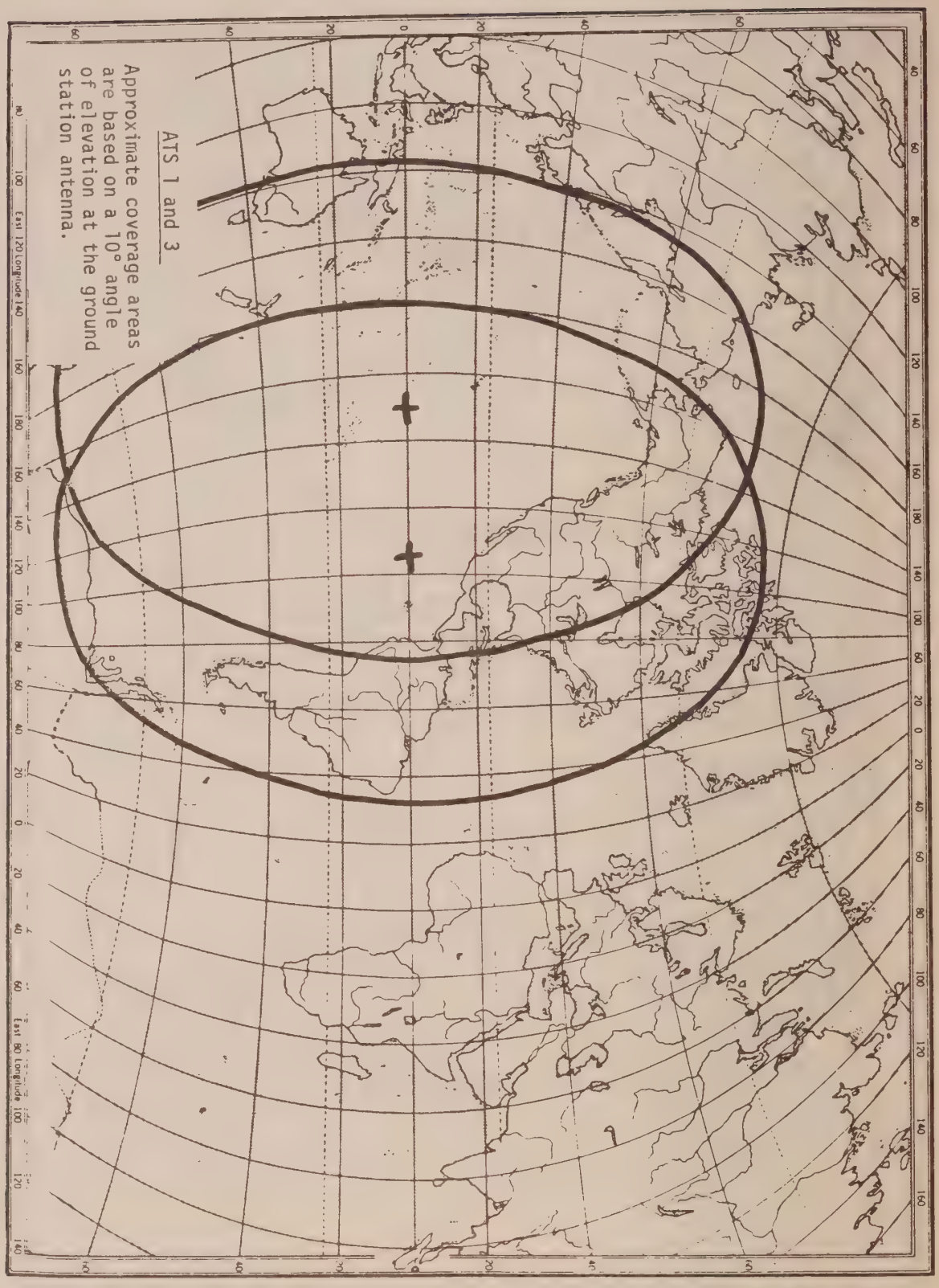
Satellite Name	Longitude	Date of Launch
ATS-1	149°W	December 7, 1966
ATS-3	105°W	November 3, 1967
MARISAT (F_1)	15°W	February 19, 1976
MARISAT (F_2)	73°E	October 14, 1976
MARISAT (F_3)	176.5°E	June 9, 1976
FLTSATCOM (F_1)	100°W	February 9, 1978
FLTSATCOM (F_2)	23°W	May 8, 1979
FLTSATCOM (F_3)	75°E	Not Launched Yet
FLTSATCOM (F_4)	172°E	Not Launched Yet

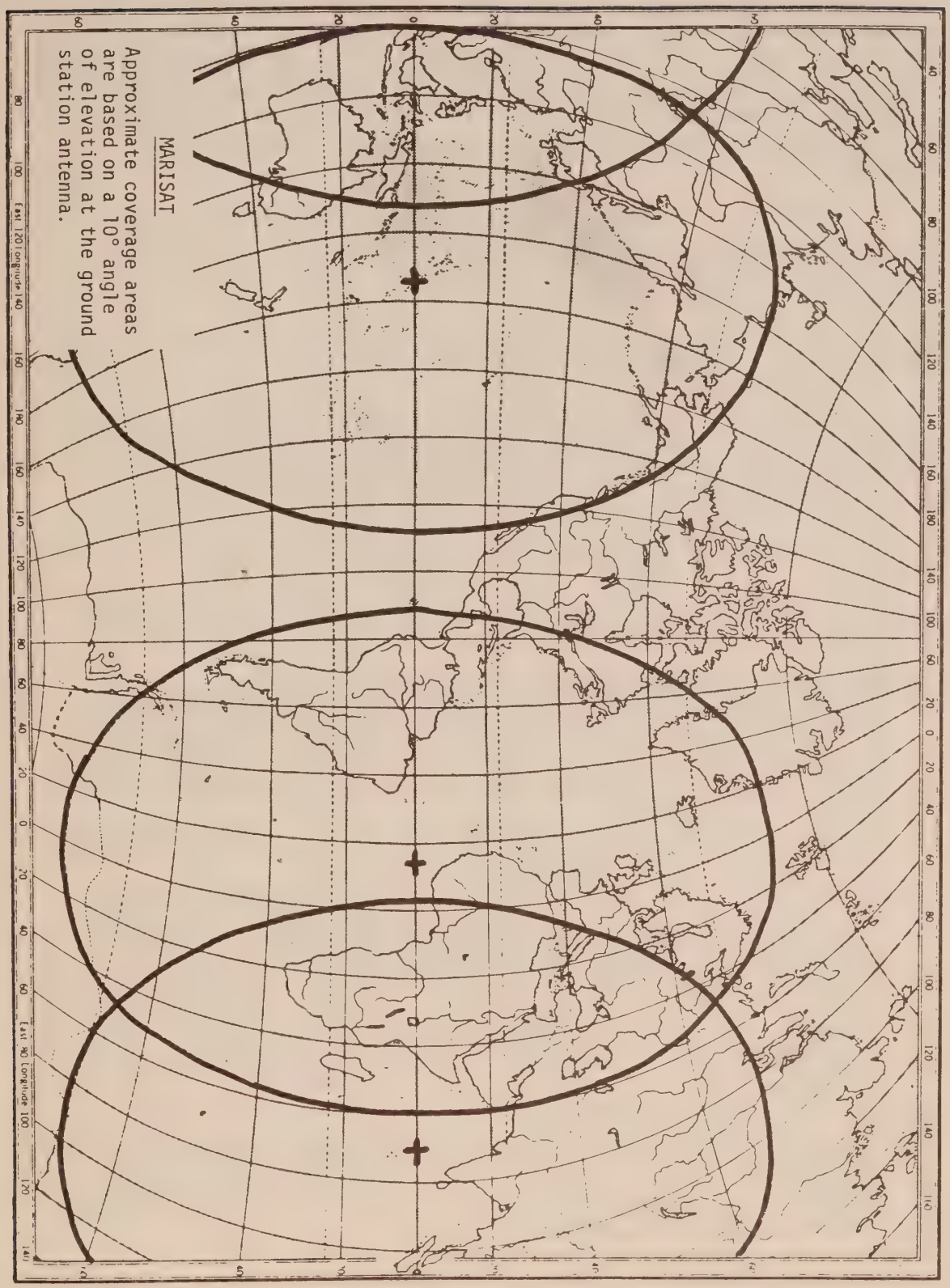
On another matter you may have noticed a mysterious white space in our April column. We had intended to give you more information on a new line of converters being produced by the Hermes Research and Development Company. Just prior to the printing of the April newsletter we were informed that the company we had written about had gone out of business. We therefore removed this section of our column but due to the late date we were unable to replace it with other material. Sorry for the white space.

We received a satellite report from Dave (IL-???). Dave didn't give us his club number or last name so all we can say is thanks Dave, whoever you are. Dave lives in northern Illinois and has been able to receive ATS-1 using an 11 element beam cut for 146 MHz and a VHF Engineering model RX-144C receiver kit modified for 135.6 MHz reception. Dave indicates that he has had better reception with this receiver than he did with the modified receiver and preamp he was previously using. According to Dave, he is experiencing a fading problem known as Faraday's rotation. As the satellite signal passes through the ionosphere its polarization is changed from vertical polarization to horizontal polarization and back again. Each time the polarization changes to horizontal (Dave's antenna is vertically polarized) the signal fades. To counteract this problem Dave suggests the use of a circulary polarized antenna. Dave states that he has noticed a gradual fading every 5-10 minutes and a fade, boost, flutter every second or so. This fade, boost, flutter he attributes to the satellite's spinning motion.

Along with the satellite report from Dave (IL-???) we also received information from Greg Salt (UT-001) and information from William Wedertz (IL-007). Because of a space shortage this month we won't be able to share their information with you but we will try to see that it is included in our next column. Until then we would like to thank all of the RCMA members who have contributed to the satellite column and we hope that you will continue to contribute in the future.


FLTSATCOM
Approximate coverage areas are based on a 10° angle of elevation at the ground station antenna.


ATS 1 and 3
Approximate coverage areas are based on a 10° angle of elevation at the ground station antenna.
East 120 Longitude
East 80 Longitude


MARISAT
Approximate coverage areas are based on a 10° angle of elevation at the ground station antenna.

International

Richard Stein, Editor

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences and any other information relating to monitoring in countries other than the United States and Canada.

Send to: Richard Stein, 456 Barrymore Pl., North Brunswick, NJ 08902.

From Ed (CA-AL-001) here are the current London Fire Brigard frequencies:

CONTROL	FREQ.	DIVISIONS	CALL SIGNS
Northern (at Wembly)	100.80	A D G J	M2FN
Eastern (at Stratford)	100.55	C F H L	M2FE
Southern (at Croydon)	101.00	B E H K	M2FS

The "CITY-WIDE" channel is handled from the Brigade Operations Room at Lambeth on 100.625MHz., call sign M2FHO

Unit call sign consists of division letter, station number, and type of aparatus-- D212 would be the Pump from Ealing Fire Station (D21). Divisional HQ units are letter and two numbers; Brigade HQ units have no letter prefix, and go from 10 (pronounced One Zero) who is the Chief Officer to 90 (Nine Five), the Brigade Photo Unit.

The above information is an excellent presentation of material that is difficult to obtain. Thank you Ed for a fine job.

From Ed (CA-AL-001), Rory (CAN-003) and George DuBois (OR-) comes the following:

- •••••many public service agencies use AM instead of FM
- •••••the vast majority of local police use 98-108MHz. British made FM radios (called VHF there) cover only 88 to 98MHz. The majority of radios sold (Japanese) cover 88 to 108 MHz. The WARC was considering the expansion of the FM band in Europe to 104 MHz.
- •••••in the case of AM, one only has to tune up on the "side tone" for pretty fair reception.
- •••••there is some activity around 150 MHz.-mainly vehicle registration info- probably the "Panda" cars(that is the pale blue and white Morris 1000's used for Metropolitan traffic)
- •••••Police agencies are converting to UHF. Most Scotland Yard and Metropolitan Police activity is in the 408-420MHz. band. This includes voters and the familiar lapel-mike radios (personal portables) the Bobbies use on foot patrol.
- •••••the Fire Service is far behind this changeover. Progress is being made there since major consolidation of fire brigades in 1974.
- •••••Low-Band in Europe is 68-74MHz- police, fire and mobile phone. (Michel- CAN-017 indicated that this is so for France). While in Spain in 1971 I could find no police or fire activity in either the 30-50 or 150-170 range.
- •••••166-172- Lots of business use
- •••••450-470-little activity, some telemetry around 450, a couple of repeaters around 455-6. One is the gas company, another the Underground (Subway) security. There are voice pagers around 454, same as here, presumably because of the availability of Japanese and Dutch (Phillips) pager units.

ASSOCIATION of NORTH AMERICAN RADIO CLUBS 15th ANNUAL CONVENTION

ANARC ►►► 80

IRVINE, CALIFORNIA

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FCC TOPICS

George DuBois, Editor

Send FCC news and information of interest that relates to two-way communications above 30 MHz and questions regarding the FCC Rules and Regulations to: George DuBois, 10048 NE Campaign, Portland, OR 97220.

The Automobile Emergency Radio Service

A lot of scanner listeners are into monitoring tow trucks. And a lot of tow truck drivers are into scanners. I get the feeling they are people who are mainly into monitoring local police activity. Maybe there's a little satisfaction in hearing the resolution of an accident call from start to finish, so to speak. Snow and icy weather provides a lot of action, too. This service is set up just for businesses which provide an emergency road service to disabled vehicles. It's also available for private road service by associations of owners of vehicles (auto clubs, like the AAA).

These channels are for tow truck companies. Only <u>one</u> channel may be assigned to a company from this group:

150.815, 150.830, 150.845, 150.860, 150.875 and 150.890.

These frequencies are available to auto clubs, who may also use them to transmit road conditions: (remember that next winter.)

150.905	452.525
150.920	452.550
150.935	452.575
150.950	452.600
150.965	

(Note that repeater operation is <u>not</u> allowed on these UHF channels. The mobiles are on the same frequency and may be kind of hard to hear.)

Finally, these channels are for tow companies and also for auto clubs when the above channels are filled. Again, only one channel from this group may be assigned to a company.

157.470, 157.485, 157.500 & 157.515

Both tow companies and auto clubs can use channels in the 851-866 mHz band and T-band (which is shared with the Railroad and Motor Carrier Radio Services). T-band looks like this:

L.A. - 472.4625 to 472.7875 and 508.4625 to 508.7875 in .025 steps.
S.F. - 484.4625-484.7875, 490.4625-490.5625, 490.6125-490.6625, 490.7125 & 490.7625.
NYC - 472.4625-472.6125, 478.5125-478.4875 & 478.6875.
Boston-472.4625-472.5375, 472.5875-472.6875, 472.7375 & 472.7875.
Phil.- 502.4625-502.7875.
Wash.,DC-496.4625-496.615.
Chicago-472.4625-472.6125 & 472.9375.

Repeaters are allowed in T-band, with the mobile units 3 mHz higher than the above frequencies.

Tow companies are also eligible in the Business Radio Service and you might want to search there also. I think this is mainly the case where the same company also runs a garage or maybe owns a group of parking lots, some other activity besides towing where they would want to have all their units on the same channel. Also, in larger cities that have no T-band allocations, the Auto Emergency channels will quite likely be filled, with no other place to go.(besides 851 mHz.)

FCC Topics (Cont.)

I got a letter from Bob Coate in Belmont, (Ma.-011), wanting to know more about the identification requirements for the stations we listen to. I already answered him by mail, but I thought others might be interested. Seems he has a special interest in the matter since the department of an Eastern college he works for was cited for violation of the identification requirements. A private college, they are licensed in the Business Radio Service.

As I explained to him, all radio services (with a few exceptions) are required to identify their station with their assigned call sign at the conclusion of each transmission or series of trans-missions. This is a basic rule of radio use and, of course, is expected of the stations operator, be he a police dispatcher or a CB user. In lieu of this, stations in the Industrial and Land Transportation Radio Services can transmit their call sign every fifteen minutes "during periods of continuous transmissions". Stations in the Public Safety Services (police, fire, etc.) can identify every half hour. This seems reasonable to me, but as Bob says, during the handling of emergencies it's kind of hard to stop and ID every 15 minutes. Besides, he says, the police in his area never ID. Well, here the opposite is true, the police agencies give their callsigns more often than required but a lot of the private outfits will ID maybe once an hour. This is poor radio procedure and, especially of a public safety agency, would indicate poor operator discipline. The thing is operators licenses aren't required for any of these services and with a business, the person who runs the radio probably also answers the phone. I really don't think the requirements are all that strict. Would the FCC revoke the license of a repeated offender, especially where the public safety is involved? No, but they sure will fine them and it probably wouldn't take long for the higher-ups to let their subordinates know they are expected to obey the FCC's requirements. An engineer at the FCC office here in Portland couldn't recall an incident where a public safety agency actually lost their license. He said the first warning is usually sufficient. The easiest alternative, as I told Bob, would be the purchase of an automatic morse code id'er, which transmits the stations' call sign every 15 minutes at the required 20-25 words per minute at the required 40% (±10%) modulation with the required 1200 Hz (±800) tone. (You can't win, can you, but at least the machine does the work.)

These are the exceptions to the identification requirements I mentioned, in case anyone is interested: Any mobile station which transmits on the same frequency as the base station, any mobile station on a repeater input frequency, provided the identifiers used by the mobile units are on file in the station records, or any station transmitting telemetry. In the Public Safety Services, stations can give their location and name of the agency, but they must notify the FCC of the specific names they will use. Same with the Railroad Radio Service, where they can use a line name, or an engine or caboose number. A mobile phone user may use the designation assigned by the licensee, such as a phone number, but the company itself must ID every half hour by voice or morse code unless a call is in progress and, in that case, immediately thereafter. Again, a location is permissable. Anyway, you get the idea. Any of the above provisions can be waived below 50 mHz where international operations can (and are being) affected or near the US borders, since anything but the callsign doesn't conform to ITU regulations.

Aircraft

Mark Holmes, Editor

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands associated with airports and aircraft plus questions, articles, and tips related to aircraft monitoring to: Mark Holmes, 1601 W. Maplewood, Marion, IL 62959. Please send all military aircraft frequencies and info to the "MILITARY" column.

EDITOR'S COMMENTS

Thanks to Iden Rogers (CA-RI-1) and Joe Lewis (MD-15) for contributing to this months column.

When submitting questions, a postage stamp or a post card for short replies would be very much appreciated. My postage bill for the year is out of this world and can no longer help the U.S. Postal Service with their fiscal problems by myself.

A pair of articles appeared in the March issue of CB Magazine, listing my name as the writer, however I did not write the articles, I don't know who wrote the articles, I didn't know a thing about the articles, nor did I give them permission to print my name. This is being mentioned just to set the records straight.

Members who would like to either send and/or receive cassette tape recordings of the various things that there are to listen to in this frequency range with other members, send me your name, address, RCMA number, and what you would like to send or receive, so that I receive it no later than May 7. This is going to be done in the July issue only, and after that issue, please use the "Contact" column.

QUESTIONS/CORRESPONDENCE

EDITOR'S NOTE: An anomymous member submitted the following questions, plus many more which will be listed in future issues.

WHAT IS MEANT BY THE TERM "HEAVY JET" OR THE WORD "HEAVY" FOLLOWING AN AIRLINES FLIGHT NUMBER? A heavy jet is an aircraft which is capable of take-off weights of 300,000 pounds or more, regardless of whether or not they will be operating at this weight during any phase of the flight. This would pertain to the following types of aircraft: all series McDonnell Douglas DC-10's, 300 and 400 series Boeing 707's, all series Boeing 747's, the A-300-B Airbus, and all series Lockheed L-1011 Tri-Star's.

I HEAR A LOT OF FLIGHTS USING THE NAME OF "CLIPPER," IS THAT AN AIRLINE OR WHAT? The word "Clipper" is the voice call of Pan American World Airways. All of their aircraft are given names such as: "CLIPPER MAYFLOWER," "CLIPPER AMERICA," "CLIPPER OCEAN EXPRESS," etc. Following the merger of National Airlines into Pan Am earlier in the year, I can only assume that National's rather large fleet of 727's and DC-10's will be named in the same manner.

IS THE EMERGENCY FREQUENCY OF 121.5 A GOOD FREQUENCY TO LISTEN TO? The frequency of 121.5 is perhaps the most overrated frequency out of the 720 possibles in the 118-136 MHz range. I would recommend listening to frequencies that produce consistent activity.

DEFINITIONS

CHOP "BRANIFF 909 IS GETTING CONTINUOUS LIGHT CHOP AT FLIGHT LEVEL THREE SEVEN ZERO, REQUESTING FLIGHT LEVEL THREE NINER ZERO" The term "chop" is simply turbulence at high altitudes. Chop/turbulence is an unstable flow of air over the earth, and is catagorized as light, moderate, heavy or severe and may be prefixed with the words occasional or continuous.

DME "NORTHWEST 743 CROSS 35 DME SOUTH OF ATLANTA AT AND MAINTAIN ONE TWO THOUSAND" DME stands for Distance Measuring Equipment, an airborne navigational aid which measures the distance from a VORTAC or TACAN in nautical miles.

FLIGHT LEVEL "WASHINGTON CENTER, LEARJET 8000G IS PASSING FLIGHT LEVEL THREE ONE ZERO TO MAINTAIN FLIGHT LEVEL FOUR ONE ZERO" When aircraft fly at 18,000 feet and above, the altitude is referred to as Flight Level. Each is stated in three digits

Aircraft (continued)

that represent hundreds of feet, such as: Flight Level One Eight Zero (FL180) means 18,000 feet, Flight Level One Niner Zero (FL190) means 19,000 feet, etc.

PARALLEL RUNWAYS "UNITED 54 TURN LEFT HEADING ONE FIVE ZERO DEGREES, CLEARED FOR TAKE-OFF RUNWAY 18 LEFT" Two or more runways at the same airport whose centerlines are parallel. If two parallel runways exist, in addition to the runway number, they are designated as Left and Right, or if three parallel runways exist, they are designated as Left, Center, and Right.

VECTOR/RADAR VECTOR "EASTERN 734 FLY HEADING OF TWO HUNDRED THIRTY DEGREES, RADAR VECTORS UNTIL RECEIVING BIRMINGHAM SUITABLE FOR NAVIGATION" A vector is a heading issued by a controller to provide navigational guidance by radar.

EDITOR'S NOTE: I have received several questions which pertain to antennas, however I know absolutely nothing about them. Iden Rogers (CA-RI-1) wrote the following article which may benefit some of you.

A quarter wave ground plane cut to 125 MHz, up 35 feet or so above the ground, that is mounted in the clear if possible, and fed with RG-58 or RG-8 coax will work quite well. The RG-8 will cost more, but a little more signal will reach the radio. If there is a letter "U" after the coax number, it is better.

The antenna should be mounted as high as possible, not to receive the aircraft, but to pick up the ground stations which are hard to receive sometimes over 20-30 miles, due to low power and low antenna installations.

If you buy a quarterwave ground plane which is designed to be cut to length, be sure it has elements that are long enough to allow operation in the aircraft band. Many such antennas come with a cutting chart which gives dimensions for various frequencies.

If you make a ground plane, modify an existing one, or buy one without a cutting chart, the radials (the elements that stick out horizontally, usually 3 or 4 in number) should be cut to 23¼ inches, and the radiator (the vertical element) should be cut to 23 inches, and this should give perfectly adequate results.

The Hustler Discone DCX works alright on the VHF aircraft band, but a ground plane works a lot better for picking up the weak ground stations.

FREQUENCIES

Joe Lewis (MD-15) submitted the following frequencies for airports in his area: Baltimore-Washington International Airport Police operates on the frequency of 453.9, Fire on 453.8, and Utility on 154.98. Washington-Dulles Airport Police operates on the frequency of 165.7125. Joe also reports that the Washington-Dulles access road is patrolled by the Fairfax County Police and Baltimore-Washington International Airport is under the state of Maryland, patrolled by the State Police.

? Beginners ?????? Corner

Have a question? If you are a new scanner listener and don't understand something about monitoring that most everyone else seems to understand, send in your question. When possible, your question and the answer will be printed. No answers will be sent by return mail. Your name will not be printed. Write to: David E. Crowley, 7234 Balson Ave., University City, MO 63130.

As many of you know, there is another monitoring organization, SCAN, underwritten by Electra-Bearcat which publishes a quarterly magazine called Scanning Today. The latest issue features a new "Beginner's Advisor column, which judging from the first effort will acqaint readers with the basics of VHF and UHF land-mobile radio systems and monitoring. Compared to RCMA, SCAN offers the member very little for his $10.00 a year, but the magazine can be helpful to beginners who may write to SCAN, Suite 1212, East Wacker Drive, Chicago, IL 60601.

After an initial flurry, questions from readers have trickled off, so again we'll expand the beginners tip for the month with a list of publications largely provided by Mike, our Public Safety Central editor, who has been so helpful to my monitoring efforts and to this column.

Beginners tip for the month: There are many, many books and magazines designed for the amateur and professional user of two-way radio systems as well as for monitor hobbyists like us. This list will only scratch the surface.

Magazines-

APCO Bulletin, Journal of Public Safety Communications (Monthly, $8.00/year) From Associated Public Safety Communications Officers, Inc. 105½ Canal Street, New Smyrna Beach, FL 32069. Excellent feature articles on communications systems, technical advances and regulatory concerns of the public safety radio community.
Communications (Monthly, $14.00/year) From Cardiff Publishing Company, 3900 South Wadsworth Boulevard, Denver, CO 80235. Aimed at commercial suppliers and users of land-mobile radio systems and services. Articles on maintenance, regulation, business affairs and new products. Gives a good comprehensive picture of the land-mobile radio industry.
Communications News (Monthly, $9.00/year) From Harcourt Brace Jovanovich Publications, 124 South First Street, Geneva IL 60134. Up-to-date articles covering a broad spectrum of communications interests including satellites, independent telephone and interconnect, data transmission, broadcast, and two-way radio. Certainly one of the best of the trades.
Firehouse (Monthly, $15.00/year) From Firehouse Magazine Associates, 515 Madison Avenue, New York, NY 10022. Especially for firefighters and buffs. Articles and photos of major fires, training and day-to-day working concerns of paid and volunteer firefighters. Founding editor is Dennis Smith, author of Report from Engine Co. 82.
The Visiting Fireman (Annual, $5.50) 203 North Washington Avenue, Batavia. IL 60510. Directory of fire buffs worldwide, lots of stiries, pictures and information on the fire service including frequencies of major systems.
Selected U.S. Government Publications (Monthly, Free) From U.S. Government Printing Office, Superitendent of Documents, Washington, DC 20402. List new government publications including many of interest to radio hobbyists.

Books-

The following are available from APCO (See above for address)

1) APCO Public Safety Communications Standard Operating Procedure Manual. $5.75
2) APCO Public Safety Standard Frequency Coordination Manual. $4.00
3) APCO Police Telecommunications Systems. $4.50
4) Introduction to the Theory of Waiting Times. $5.00
5) 900 MHz Trunked Communications System Functional Requirements. $10.00
6) Report on Implementation of the N.E.A.R. (National Emergency Aid Radio) Program. $5.00
7) Law Enforcement Telecommunications: Problems and Recommendations. $10.00

No.1 is the dispatcher's bible, containing the ten-codes and much more practical information; 2 and 3 together form an excellent introduction to the technicalities of public safety radio. No.s 4 and 5 are quite specialized, while No. 6 deals with 11-meter CB as a means to contact public safety agencies. No. 7 describes problems common to the implementation and operation of police communications systems.

Here are a few of the numerous publications available from the Superintendent of Documents. Check your local library's catalog of government publications for prices, if not listed here.

FCC Rules and Regulations, Volume V, Parts 87, 90, 94, March 1979. An essential reference for any serious monitor. Covers rules and alloca-

tions for Aviation, Land-Mobile and Fixed Microwave services.
Radio Laws of the United States, 1978, $4.25, Stock No. 5201-00056. Includes the Communications Act of 1934 and all ammendments, giving pertinent information on the Act, operation of the FCC, radio treaties broadcast and satellite laws, penal provisions and fines, etc.
Operation of the National Weather Service, Stock No. 003-018-00087-3. Covers all operations of the weather service, incluing maps, radio frequencies, forcast zonesteletype circuits, aviation weather system and much more.
Aviation Weather Servcies, Stock No. AC 00-45A . Gives a thorough description of aviation weather broadcasts, how to interpret what you hear, weather coding systems, types of forecasts, etc.
A Guide to Voice Scramblers for Law-Enforcement Agencies, 1976, $1.05, Stock No. 003-003-01735-3.

And,

How to Use Your Marine Radiotelephone, 1977, $3.00. From Radiotechnical Commision for Marine Services, P.O. Box 19087, Washington DC 20037 Gives instructions for using marine radio, explains all US marine VHF frequencies and their use.
Sentry Quartz Technology Manual, 1977, $2.95. From Sentry Manufacturing Company, Crystal Park, Chickasha, OK 73018. You can buy your crystals anywhere you like, but this little book explains all the holders, types, tolerences and MIL specs.
Nationwide Services Directory, $10.00. From Telelocator Network of America, 1800 M Street Northwest, Suite 1020 North, Washington DC 20036. Provides channels, telephone numbers and special services for radio common carrier (other than telephone Co.) mobile telepones operations nationwide. See "Business, Etc." section, Feb.-Mar. 1980.
1980 Roster of Carriers, $25.00. Also from Telelocator, gives all of above plus frequencies, addresses and names of officers of all RCCs.

There! If you read even a fraction of these, you won't be a beginner anymore.

Finally, I spoke with several monitor hobbyists over the weekend and each told the same story. They had bought a Bearcat 250 and each one had to be returned to factory or store before the week was out. The two Bearcat 210s with which I am aquainted closely share the same disappointing early history although both work fine now. I hear similar stories about the Regency keyboard programmables. In fairness to the manufacturers involved, many of these highly complex devices work very well considering all they are asked to do at a such a low price. However, beginners and the rest of us might well be cautious about the latest and fanciest programmable scanners. Give it at least a half hour's test in the store, exercising all its functions well before taking it home.

Business, Etc.

Chuck Gysi, Editor

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufacturers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to: Chuck Gysi, P.O. Box 216, Willow Grove, PA 19090.

Business, Etc. (continued)

Where has everybody been? I'm sitting here waiting for members to send in contributions for this column, and what happens? ZILCH! The number of folks sending in good lists has trickled down to about nothing. I don't want to have to rely on my regular contributors all the time. It isn't fair. C'mon, send a little info. It's for the good of all of us.

News Media/Film

EASTERN MASSACHUSETTS NEWS MEDIA
From Ed (MA-017)

152.930	WGBH-TV Ch. 2 (PBS) Boston
152.990	WSMW-TV Ch. 27 Worcester, news crews
153.170	WGBH-TV Ch. 2 (PBS) Boston
173.325	Worcester Telegram and Gazette, circulation and reporters
173.375	Boston Herald-American
452.975	Boston Herald-American reporters R
453.000	Boston Globe reporters R
450.050	WBZ-TV Ch. 4 (NBC) Boston, Instant Eye News
450.0875	WCVB-TV Ch. 5 (ABC) Boston, engineering crews (input)
	WNAC-TV Ch. 7 (CBS) Boston, camera cues
450.150	WHDH/WCOZ Boston "Skyway Patrol" traffic reports (input)
450.350	WBZ-TV Ch. 4 (NBC) Boston, news reporters
450.450	WBZ-TV Ch. 4 (NBC) Boston, unknown use
450.5125	WCVB-TV Ch. 5 (ABC) Boston, studio to van feed (input)
450.5875	Unknown station, engineering crews (input)
450.550	WBZ-TV Ch. 4 (NBC) Boston, camera cues
450.6125	WCVB-TV Ch. 5 (ABC) Boston, remote vans pickup R
	WNAC-TV Ch. 7 (CBS) Boston, unknow use
450.650	WBZ, Boston, traffic reports (input)
450.750	WEEI Newsradio 59, Boston, reporters? (input)
450.850	WEEI Newsradio 59, Boston, traffic reports (input)
455.050	WBZ-TV Ch. 4 (NBC) Boston, Instant Eye News
455.0875	WCVB-TV Ch. 5 (ABC) Boston, engineering crews R
	WNAC-TV Ch. 7 (CBS) Boston, camera cues
455.1125	WHDH/WCOZ, Boston "Skyway Patrol" traffic reports R
455.350	WBZ-TV Ch. 4 (NBC) Boston, news reporters
455.450	WBZ-TV Ch. 4 (NBC) Boston, unknown use
455.5125	WCVB-TV Ch. 5 (ABC) Boston, studio to van feed R
455.550	WBZ-TV Ch. 4 (NBC) Boston, camera cues
455.5875	Unknown station, engineering crews R
455.6125	WNAC-TV Ch. 7 (CBS) Boston, unknown use
	WCVB-TV Ch. 5 (ABC) Boston, remote vans pickup (input)
455.650	WBZ, Boston, traffic reports R
455.750	WEEI Newsradio 59, Boston, reporters? R
455.850	WEEI Newsradio 59, Boston, traffic reports R

SAVANNAH NEWS MEDIA
From Lewis (GA-008)

173.325	Savannah News Press, reporters and circulation
170.150	WTOC-TV Ch. 11 (CBS) news and film crews
461.400	WSAV-TV Ch. 3 (NBC) news and film crews
462.050	WJCL-TV Ch. 22 (ABC) news and film crews

NEXT MONTH: An exclusive list of Philadelphia area news media freqs.

GMRS

Doesn't anyone listen to General Mobile Radio Service frequencies? If so, send in lists of activity you have heard on this band.

Business

WHAT? No business frequencies this month? Doesn't anybody monitor routine business channels? C'mon, send in your lists. If your city or area is known for a particular type of business (such as the Pittsburgh steel and Detroit auto freqs that ran in this column recently), send in a list of freqs that are used by those businesses.

Motor Carrier

AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA RADIO SYSTEM
From Joe (MD-015)

150.905	KML 343	Bakersfield
	KMJ 932	Riverside-Pomona
	KZQ 603A	Metro Ch. 1-HQ
	KZQ 603B	Metro-Highland Park
	KOM 608	Palm Springs
150.920	KAU 987A	San Diego-Date Street
	KAU 987B	San Diego-El Cajun Blvd.
	KAU 987C	San Diego-Solana Beach
	KCR 615	San Gabriel Valley
	KCY 898C	Harbor-Inglewood
150.935	KEX 506	Lancaster
	KCY 898B	Harbor-Torrance
150.950	WRL 989B	Anaheim-Laguna Hills
	WRL 989C	Anaheim-South Laguna
	WRL 989D	Anaheim-Costa Mesa
150.965	WRL 989E	Anaheim-Norwalk
	WRL 989F	Anaheim-Fullerton
	WRL 989G	Anaheim
	KMJ 584	Van Nuys
	KEF 892	Mammoth Lake
151.625	KIQ 800	Tow Instructors
452.525	KZQ 603C	Metro-Ch. 3-HQ
452.550	KZQ 603D	Metro Ch. 2-Culver City
	KZQ 603E	Metro-Santa Monica Pier
	KFU 545	Riverside-Box Springs
452.575	KZQ 603F	Metro Ch. 4-Metro
	KGU 561	Van Nuys-Canoga Park
	WRL 989H	Anaheim-Garden Grove
	WRL 989I	Anaheim-Costa Mesa
452.600	KCY 898A	Harbor-Long Beach

TOW CODES
From Eric (CA-LA-045)

T-1	Flat tire, good spare
T-2	Flat tire, no spare
T-3	Need battery jump
T-4	Out of fuel
T-5	Will not start
T-6	Locked out of vehicle
T-6B	Keys locked in truck
T-7	Requires towing
T-8	Accident
T-8F	Car fire

Mobile Phone/RCC

This is crazy! I can't believe there are no lists to place in this column either. There's plenty going on in the mobile phone and radio common carrier bands. Write in and tell me so everyone can benefit.

Utility

PART III--LOS ANGELES CITY WATER AND POWER SYSTEM
Owens Valley Hi-Band System

The Owens Valley hi-band system is designed to provide communications throughout the Owens Valley. Operations are normally conducted on 158.19 MHz. Units capable ot transmitting on 173.25 MHz may, however, extend the range of their signals by accessing a mobile relay transmitter located at Crestview Mountain. The Crestview Mountain mobile relay transmitter receives signals on 173.25 MHz and retransmits those signals on 158.19 MHz. A base station at Aurora Peak controls Crestview by transmitting on 173.25 MHz and receiving on 158.19 MHz. 158.19 MHz has been designated Channel 3 and 173.25 MHz has been designated Channel 4.

The Independence Radio Telegraph Office guards this frequency with base stations on Aurora Peak, Poleta Canyon Mountain and Cottonwood Mountain, and is capable of making patches from mobile units to the telephone system during normal office hours.

Other facilities not on mountain peaks guarding the hi-band system include: Haiwee Power Plant, Big Pine Power Plant, Independence RTO and the Control Gorge Power Plant.

The mobile call sign is KA 9180.

Security

WASHINGTON AREA SECURITY
From Marv (MD-014)

461.150 Beltway Alarms
461.375 Alarm Systems
460.925 Alarm Specialists
459.100 Capitol Protective
463.700 Capitol Protective
461.675 Burns Security
463.375 Crime Control-Rockville
464.125 Crime Control-Towson
462.100 Guardian Security WBQ 245

School

UNIVERSITY OF OKLAHOMA RADIO SYSTEM
From Ken (OK-006)

The University of Oklahoma police on the main campus at Norman use a repeater on 154.800 with input on 155.85. The police on the medical school campus in Oklahoma City use a repeater on 154.755 with input on 155.91. The "top brass" on the Norman campus are also equipped to operate on the Norman PD channel (repeater 154.74, input 155.43) and the Norman FD channel (repeater 154.385, input 153.845). The university police's ambulances are equipped with 155.385 to talk to the Norman Municipal Hospital and 155.34 to talk to other area hospitals. The university's Athletic Department uses 155.745, especially during football games and the maintenance department uses a repeater on 155.025 with 158.865 input.

OUPD RADIO CODES

10-0 Acknowledgement requested
10-1 Receiving poorly
10-2 Receiving well
10-4 Message understood
10-5 Relay
10-6 Busy
10-8 In service
10-8X In service with female, mileage
10-9 Repeat
10-10 Out of service, subject to call
10-11 How do you read my signals?
10-12 Visitors or officials present
10-13 Request weather forecast
10-14 Escort duty
10-15 Prisoner in custody
10-16 Pick up...
10-18 Complete present assignment as quickly as possible
10-19 Return to headquarters
10-20 What is your location?
10-21 Public service...
10-22 Disregard last transmission
10-24 Trouble at headquarters, all main campus units report
10-25 Do you have contact with...?
10-27 Check for student, name...
10-28 Check vehicle registration, tag
10-29 Check for stolen vehicle...
10-30 Building secure
10-31 Building secure, authorized personnel inside
10-33 Open door, building...
10-34 Open window, building...
10-35 Confidential information
10-36 Correct time
10-37 Operator on duty?
10-38 Parking complaint at...
10-39 Status of...

Business, Etc. (continued)

10-42 Check traffic record...
10-43 Check operator's license...
10-44 Check for record and wanted
10-45 Ambulance required (give circumstances)
10-51 Drunk
10-55 Dead body, notify medical examiner
10-56 Attempted suicide
10-57 Firearm discharged
10-58 Drug violation
10-59 Malicious mischief
10-63 Missing person
10-65 All-unit dispatch
10-66 Suspicious person
10-69 Any traffic for this unit?
10-70 Prowler
10-71 Shooting
10-72 Knifing
10-73 Peeping Tom
10-80 Explosion
10-91 Animal problem, specify nature
10-97 Arrived at scene

12-5 Motorist assist
12-8 Meet...
12-15 Leaving main campus
12-16 Returning to main campus
12-27 Abandoned property
12-47 Incorrect radio procedure
12-50 Open the gate
12-51 Close the gate
12-66 Suspicious vehicle
12-76 Accident, property damage only
12-81 Accident, minor injury
12-82 Accident, serious injury or death
12-89 Accident, hit-and-run

Code 1 Your convenience
Code 1½ Immediately
Code 2 Urgent, overhead lights if necessary
Code 3 Emergency! Overhead lights and siren
Code 4 No assistance needed
Code 5 Stakeout
Code 7 Out of service, coffee or lunch
Code 8 Burglar alarm
Code 9 Go to alternative frequency
Code 10 Bomb threat, give location
Code 15 Request assistance, routine
Code 20 Request assistance, urgent
Code 30 Request assistance, emergency, officer in danger
Code 35 Use caution, complaint is of a suspicious nature
Code 40 Use caution, complaint has racial ramifications

Code 187 Homicide
Code 207 Kidnapping
Code 211 Robbery
Code 245 Assault
Code 261 Rape
Code 311 Indecent exposure
Code 415 Disturbance (specify nature)
Code 460 Burglary
Code 486 Vandalism
Code 487 Larceny
Code 501 Drunk driver
Code 503 Stolen vehicle
Code 510 Speeding
Code 904 Fire
Code 904A Fire alarm
Code 1000 Plane crash
Code 5050 Mental case
Code 211A Armed robbery (hold-up) alarm

Freak Freqs

From MICHAEL (KS-004):

When the State Fair is in Hutchinson, Kansas, the Royal American Shows comes in on the Rock Island Railroad with their own train. They use 151.625 for radio traffic between the train and the fairgrounds, which is about six miles away. The same frequency is also used by the rides and other personnel such as maintenance at the fair.

GOLFING FREQUENCIES IN SOUTHERN CALIFORNIA
From Karl (CA-OR-022)

151.685	KLI 281	Rolling Hills Country Club, Los Angeles
151.805	KJB 569	Crosby National Pro-Am, Pebble Beach, CA
151.865	KLZ 481	Tamarisk Country Club, Palm Springs, CA
154.570	KK 8699	Hollywood Turf Club, Inglewood, CA
	KZ 4586	Andy Williams San Diego Open, San Diego

VHF Marine

Rod O'Connor, Editor

Send information, articles, frequencies and how they are used and questions that relate to private, commercial and Coast Guard VHF maritime and inland waterways radio communications to: Rod O'Connor, USCG Group, 259 High St., South Portland, Maine 04106.

For the time-being, I have completed my series on the U.S. Marine Operators. If any interest is shown, I may start a special column on the Great Lakes and inland rivers operators. In the meantime, it is time to empty out my mail-file and share some of the information which has been received over the past few months. I appreciate the time and trouble many members have taken to contribute their information.

From CHUCK (MD-004)

Maryland State Marine Police use 39.33 mhz as their frequency. USCG Group Baltimore (Area of coverage is Northern Chesapeake Bay-Ed.) main frequency is VHF Channel 81 - 157.075 mhz.

From MIKE (NY-058)

"Last summer (79) Radio station WDJF-FM at Bridgeport, CT used marine reports from Captain Win Cyrus onboard the "Blue Denim" via Bridgeport Marine Operator Channel 27. The reports were taped at WDJF-FM for air-play". (This set-up was written up in a recent issue of "New England Offshore", a newsmagazine for yachtsmen in New England waters. I believe it is a similar set-up to what was described by ED (CT-001) in the Feb/March newsletter. Mike doubts it will be back again this summer, due to a format change at WDJF-FM, although it might be worth listening for, anyway-Ed.)

From MARK (IN-014)

Saint Lawrence Seaway Control uses VHF Channels 11 (156.55 mhz.), 12 (156.6) and 13 (156.65). Saint Mary's River (Soo) Control uses Channel 12 also. Channel 26 VHF (161.90 receive only) is used for coded Marine weather forecasts. (This is unique to the Great Lakes, I believe. It is not used here on the east coast. It was not used in Alaska, and I doubt it is used for that purpose on the West Coast. Do any other readers have other info on this unique development? - Ed.)

Michel, (CAN-017) has furnished several fine booklets from Canada, including a very valuable listing published by the Canadian Coast Guard with lists, maps, and frequencies of the Canadian Marine Operators, and other Marine listings from north of the border. Also contributing Canadian Information is George (OR?) In next month's edition I will try and go into detail with much of the material. Of special interest to Louisiana members:

1980

POLICE CALL

(Southern California Detail Edition)

CODES

FREQUENCIES / CALL LETTERS

● POLICE ● AMBULANCE ● RESCUE SQUAD

● FIRE ● PARAMEDIC ● GOVERNMENT

CITY / COUNTY / STATE / FEDERAL

▶ 160 AM-aircraft frequencies

▶ U.S. Government information extensively revised

▶ Radio-TV remote broadcast pick-up fully revised

$ 5.95 at selected Southern California book-stores, magazine stands and radio stores or it may be ordered directly from Chick Ryel & Co., P.O. Box 762, Woodland Hills, CA 91364 (California residents add 6% sales tax).

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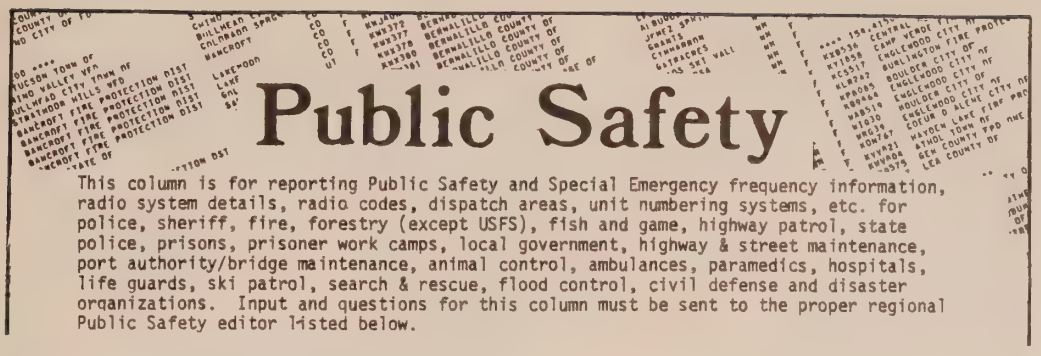

Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

PUBLIC SAFETY - EAST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia and West Virginia to: Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

Greetings! For the first time in a long while I can finally say that the quality and quantity of the mail coming into me has definitely picked up! Thanks to all of you who have sent in data, please keep it up. Concerning the New England RCMA membership meetings I've mentioned the past articles, I have had good response to this also and I plan to start calling on members soon to set up a good time and place for all. If you haven't written to me yet that you would be interested in participating in such a get-together, please drop me a line soon so that you won't miss the first meeting. If you would like to save you're hard working Eastern United States Public Safety editor a little trouble in typing these articles, all you need to do is type neatly any data you wish to send in so that I don't have to type it over. The page width must be seven inches and it can be as long as you wish. This request really only applies to the long, comprehensive works that are sent to me -such a piece will probably be published in this report. If you're not able to do this it is absolutely no trouble at all for me to re-type written matter, so don't ever hesitate to send in information in whatever form, although neat, you like. Many members have written to me asking for particular frequency or code data, and they've included SASE's for my reply. For all of you who did that, I have NO idea of such information unless it is for Massachusetts. The only way I can obtain such specific data for other states is through the mail which I receive. Thus, if you would like to ask other members to send you -or I so that I can reprint for all- specific data you'd like to know, just write me and pose the question you would like me to ask. Also, people have written saying, "Please send any information you have on Florida, I'll be glad to pay for photocopying." Please understand that any information I do have has been, or will be, printed in an article. It would be a waste for me to do this.

A couple other notes: Mike Crenshaw would like to know the frequency of the Georgia Bureau of Investigation. I don't know if he means the F.B.I. or some arm of the State Police. If that is S.P. then maybe someone would like to help out. Eddie Muro of New York would like to know the New York City Fire Department frequency for deploying and talking to men inside buildings. Finally, Ken Pehl of Texas found an "S9" magazine article talking about the Virginia Highway frequencies and how they have been causing interference to stations that have long had the channels. Ken was interested if they ever got the radios on the air with the frequencies 158.985,159.0, 159.135 and 159.165. I know someone can help out with that.

OHIO

Below is just a sample of a lot of great data JERRY OH-015 has been sending. I'll print more of his information in later articles. Thanks Jerry!

AMBULANCE CODES MANSFIELD AREA

101	Out of service	102	In service
103	OS***Subject to call	104	OOS***Equipment failure
105	Call base by public service	106	Call given point by phone
107	Stand by	108	Unable to read, change location
109	What is your load	110	Traveling empty
111	Traveling with pt.	112	Mental Pt.
113	Maturnity Pt.	114	Auto accident***Emergency
115	Emergency call	116	Emergency call***02

Public Safety - East (continued)

117	Invalad call***Immediate	118	Invalad call***02
119	Invalad call***Regular	120	Need of cars at our location
121	Call police to our location	122	Call Sheriff to Our location
123	Call OSP to our location	124	Call Fire dept. to our location
125	Call cornorer to our location	126	Emergency transfer out of town
127	Natural Death	128	Dry run
129	DOA	130	Fatal accident
131	Car accident-no injuries	132	Homicide
133	Sucide	134	Overdose
135	Burn pt.	136	Rec. call on police radio
137	Signal 103 at home	138	Eating
139	What is your location	140	Death call
141	General Hospital	142	Emergency room MGH
143	X-ray MGH	144	Lab MGH
145	Peoples Hospital	146	Madison Hospital
147	Richland Hospital	148	Crestline Hospital
149	Galion Hospital	150	Bucyres Hospital
151	Plane crash	152	Intoxicated
153	Need help at (MGH)		

(Mansfield Ambulance Service -37.98, 155.235)

STREET CODES

1	Park ave. W	2	Park ave, E.
3	13 North	4	13 South
5	42 North	6	42 South
7	39 West	8	39 East
9	EXP west of 13	10	EXP East of 13
11	545 North	12	BOWMAN
13	West 4th	14	Millsboro
15	Interstate 71 north of 13	16	Interstate south of 13
17	314 and 30 South	18	314 and 30 North
19	Graae Street	20	Hanley raod
21	Carpenter Road	22	Marion ave. Road

PATIENT CONDITION CODE

70 VITAL SIGNS
71 NOTIFY E. R. DOCTOR
72 MORE THAN ONE DOCTOR REQUESTED
73 LACERATIONS
74 FRACTURE
75 HEAD INJURY
76 BURN
77 HEART CONDITION
78 POISON
79 BREATHING DIFFICULTY
80 EYE INJURY
81 O. B.
82 C. V. A.
83 VOMITING
84 DIABETIC
84A DIABETIC COMA
84B INSULIN SHOCK
85 Unconscious
86 MENTAL DISORDER
87 ASPHYXIATION
88 CONVULSIONS
88A EPILEPTIC
89 NERVOUS DISORDER
90 CHOKING
91 OVERDOSE
92 UNDETERMINED
93 NOTIFY CORONER
94 HEMORRHAGE
95 GUNSHOT WOUND
96 ELECTRICAL SHOCK
97 KNIFE WOUND
98 Back Injury
100 C. P. R. in PROGRESS
101 GOOD - STABLE
102 FAIR - BORDERLINE
103 GUARDED - CRITICAL

COSHOCTON COUNTY EMERGENCY AMBULANCE SERVICE CODE SHEET

COSHOCTON COUNTY EMERGENCY ASSN

SIGNAL		SIGNAL		CODE	
1	CONTACT SHERIFF	37	CAR OUT OF SERVICE (OFF AIR)	22	DROWNING
3	CONTACT CHIEF DEPUTY	39	GIVE LOCATION	24	DRUNK
5	CONTACT HEADQUARTERS	41	ONE UNIT IN RADIO CONTACT	26	FIGHT
7	LICENSE REGISTRATION (REQUESTED)	43	HOME	28	FIRE
7A	STOLEN FILE CHECK (REQUESTED)	45	CONTACT NEWS MEDIA	30	GAMBLING
9	INVESTIGATE COMPLAINT	47	GET REPORT	32	HOMICIDE
11	ARREST RECORD CHECK (REQUESTED)	49	RADIO REPAIR	34	JUVENILES
13	SPECIAL DETAIL	51	CANNOT ANSWER	36	LARCENY
15	WARRANT OR PAPER	55	CIVIL DEFENSE ALERT	38	MISSING PERSONS
		99	EMERGENCY TRAFFIC (ALL STAND BY)	40	MAN WITH GUN
				40A	MAN WITH KNIFE
				42	NATURE UNKNOWN

17 CONTACT PARTY IN PERSON
19 CONTACT PARTY BY PHONE
21 PRISONER
23 OFF AIR TO EAT (GIVE LOCATION, PHONE)
25 RETURN TO HEADQUARTERS
27 EMERGENCY RUN
29 SQUAD OR AMBULANCE (REQUIRED OR DISPATCHED)
29A NON EMERGENCY
31 WRECKER REQUIRED
33 CAR IN SERVICE
35 ON PATROL

CODE

2 ACCIDENT (PROPERTY DAMAGE)
4 ACCIDENT (INJURY)
6 AIRCRAFT CRASH
8 ASSAULT
10 ASSIST OTHER UNIT
12 BURGLARY
12A BURGLARY IN PROG.
14 BAD CHECKS - FORGERY
16 DEAD ON ARRIVAL
18 DOG BITE
20 DOMESTIC TROUBLE
44 OFFICER IN TROUBLE
46 PROWLERS
48 RAPE
50 ROBBERY
50A ROBBERY IN PROG.
52 SHOOTING
54 STABBING OR CUTTING
56 STOLEN CAR
58 SUICIDE
60 SUSPICIOUS PERSON
60A SUSPICIOUS CAR
62 TRAFFIC DETAIL
64 VANDALISM
66 ESCAPE OR JAIL BREAK

MARYLAND-VIRGINIA-WASHINGTON D.C.

Marv Holverstot MD-014 wrote: Enclosed you will find Public Service listings for the Washington D.C. Metro area. Maryland and Virginia Metro counties and cities are also included. Of course these are just a few that I have available. These listings are either corrected information or I have not seen published in the RCMA Newsletter as yet. I am preparing several updates and new listing information to foward to you for future insert in the newsletter. Thanks for your fine column, keep up your work!

Thanks Marv, and I'll look foward to your updates! Below is what Marv sent, and I have just used his sheets for the most part, but in order to save space you'll notice I typed in other parts of his work in blank areas.

Public Service Listings for Washington, D.C. Metro Area-

Fairfax County, Va.

Police-

F1 Fairfax	460.175	R	KLR249
F2 Annandale-Alex	460.125	R	KLR248
F3 McLean	460.30	R	KLR247
F4 Detectives/Special	460.225	R	KLR249

Station #1 HQ Fairfax (D1)
#2 Groveton-S.Alex(D2)
#3 McLean (D1)
#4 Mason-W.Alexandria (D1)
#5 Reston (D1)
#6 Franconia-Alex Central (D2)
#7 Springfield (D2)
#8 Chantilly-Dulles (D2)

Fairfax County Sheriff	39.54	KIB950
County Highway-Roads	39.66	

FIRE-

F1 Fire Dispatch	460.575	R	
F2 Medics	460.60	R	KXX528
F3 Fireground C/C	460.625	R	KXX528
F4	46.08		
Board of Education	154.995		KDJ486

Montgomery County, Md.

Police-

F1 Rockville	494.7125	R	KYX558
F2 Bethesda	494.8625	R	KXF426
F3 Silver Spring	494.9125	R	
F4 Wheaton	495.3125	R	KXF427
F5 Germantown	495.3375	R	KXF425
F6 *	495.3675	R	(unused presently)*
F7 SOD	495.3875	BM/S	
F8 Countywide *	495.4125	R	

WASHINGTON, D.C. Police:

HQ Indiana Ave NW
D1 4th St. SW
D2 Idaho Ave NW
D3 V St. NW
D4 Georgia Ave NW
D5 Badensburg Rd NE
D6 Benning Rd NE
D7 Mississipi Ave SE

Harbor Section, Water St. SW
Air Section, National Airport

Citywide 1	460.325	R	KLG615
Citywide 2/Traffic	460.4	R	KLG613
Citywide 3/Dist.1	460.45	R	KLG614

SOD (Special Events Parking Enf. 460.275 R KLG611

TACTICAL

1	460.150	R	KLG609
2	460.250	R	KLG610
3	460.450	R	KLG607
4	460.475	R	KLG603
5	460.350	R	KLG604
6&7	460.425	R	KLG606

District-Stationhouses:
(Detectives, Executives, Stations)

CITY ZONE 1 Dist. 6&7 460.025
2 Dist. 2&3 460.100
3 Dist. 4&5 460.200

F9-F1 Simplex (car to car)
F10-F2 :"
F11-F3 "
F12-F4 "
F13-F5 "
F14-F6 "

NOTE: Germantown Station was opened in February.

F6 is reserved for future upcounty stationhouse.

Fireboard-

F1 Ground	153.95 BM	KGC334
F2 Dispatch	154.16 BM	KCP599
F3 Mutual Aid	154.28 BM	(also used statewide)

Medics-

*MED #1	463.000	Surburban Hospital	KWL416
2	463.025	Holy Cross Hospital	KWL414
3	463.050	Washington Adventist Hospital	KWL417
4	463.075	Montgomery General Hospital	KWL415
5	463.100	Shady Grove Adventist Hospital	KWL418

(All MED channels are coordinated with Maryland State)

County Public Works-
Misc. County Agencies 155.82 Rout (Rockville)

County Sheriff (Bethesda Court) 155.52 BM/S KCP560
EPA-Animal Control-Humane Society- 155.10 BM/S (Rockville)KBE466
Board of Education- Security 155.805 BM/S (Rockville)KBQ802

County Transportation Dept-
County Roads- F1 Highway-Traffic 453.40 R KCG807
F2 Transit 453.95 R
F3 Parking Enforce 150.995 BM/S

Maryland National-Capitol Park and Planning Commission

Montgomery County- Parks	Admin Channel		159.39 BM/S (Silver Spring)
Park Police	F1	Dispatch KIK218	151.28 R (Silver Spring)
Park Service	F2		151.34 BM/S
Prince Georges County- Park Police			159.315 R (College Park)

City of Rockville, MD.

Police 495.2375 Rout KXY611
(Rockville city uses voice scramblers on occasions)

City of Takoma Park,MD.

F1 Special 39.76
F2 Dispatch 39.82 KGB248

Washington, D.C.

Police Special
Executive Personnel page- 154.86 KLG605
159.15 KLG612
Unit Operstions-Broadcast 159.03* KBZ474

(used to broadcast special events announcements concerning activities to all units,citywide)

Metro Transit (Subway-Bus) Police

Dispatch 161.385 BM/S KSL840

WASHINGTON D.C. Fire:

F1	Dispatch	154.190	KGA611 (all)
F2	Control	154.325	
F3	Mutual Aid	154.280	
F4	Ambulance	154.205	

F1 repeater in 154.40

Prince Georges County-Md.

PG County Sheriff

Fireboard-

F1 C/C	495.0625 R
F2 Ground	494.8375
F3 Special	494.7875
F4 Dispatch	495.0125 R
County Roads	159.18 Rout
Board of Education	153.785 Rout

Police-

F1 Hyattsville	494.6875 R
F2 Clinton	494.5625 R
F3	494.9375 R
*F4 Seat Pleasent	495.1375 R
F5 Bowie	494.5375 R
F6 Oxen Hill	495.0875 R
F7	494.8875 R

*County Police Detectives 155.01 BM/S
155.79 Rout
155.58 R

PUBLIC SAFETY - CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alabama, Arkansas, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee and Texas to: Mike Redman, P.O. Box 1177, St. Charles, MO 63301.

Send material and questions for Illinois, Indiana and Wisconsin to: John Arendt, 327 Boulder Hill Pass, Oswego, IL 60543.

Greetings! Welcome to the Public Safety Central Column for May! There will be a report of the RCMA Spring Festival in the June column. I am hoping to prepare a story on the Missouri Conservation Commission radio system. With summer fast approaching, let me encourage you to send details of state forestry/conservation, park departments, and wildlife commissions for publication. This will surely make your summer outings and vacations more enjoyable. I have yet to hear from our friends (or haven't heard recently) with information for the states of Alabama, Arkansas, Kentucky, Mississippi, Nebraska, North Dakota, South Dakota, and Tennessee. I don't want to leave you folks out, so let's hear from you. Many of us in the Midwest are in the middle of the tornado season. This can make for exciting listening during periods of severe weather on area Civil Defense nets, both public safety and amateur repeater. Send in details of your local system. And speaking of Civil Defense, or Civil Preparedness, as it's called today, does anyone know the frequencies of the tones used to activate the Illinois State '42.50' Alert system? I'll quickly run through a few of the local systems I am familiar with, then on to business.

St. Clair County Illinois Civil Defense*	KSG935	158.835
St. Clair County to St. Louis Weather		162.150
St. Charles County	Repeater WBH987	155.835
St. Louis County (Alerting only)*	KZC638	155.865
State of Illinois*		42.500

*indicates tone alerting to schools, public agencies, PDs, etc. I am sure there are more not just locally, but in your own area. Send them in- we'll print them!

MISSOURI

There is a rumor that the Missouri State Patrol is contemplating a frequency shift- unknown if the entire system is changing or just the repeaters that rebroadcast the low band mobiles. Have any ideas? For the enlightenment of our newer members, here is a brief summary of the Missouri system:
The base stations dispatch on 42.12 and 42.06 Mhz. Mobiles respond on 42.32 and 42.22 Mhz. respectively. Car to car traffic is handled on 42.12 and 42.06 Mhz. Mobiles distant from the base are rebroadcast on high band repeaters of 154.695 and 154.92 Mhz. There surely must be interference between the 154.695 repeater and Illinois State's '14' station on 154.695 Mhz. Mobiles have the following channel configuration, frequently referred to by the base stations:

F1 42.22T/42.06R Mobile to Base
F2 42.06T/42.06R Mobile to Mobile
F3 42.32T/42.12R Mobile to Base
F4 42.12T/42.12R Mobile to Mobile

Base to Base traffic is conducted on 42.380 Mhz. All base stations are equipped with 155.370 (Intersystem), and 155.475 (Mutual Aid). I believe that mobile extenders are used in rural areas- can anyone enlighten me? Now this information is new. The Missouri Water Patrol (1200 series) can be found on the Sheriff's Net (155.730 Mhz.), and on the statewide repeater network, with input of 154.830 and repeater outputs of 155.595 in some areas and 155.895 in St. Louis, and the local area. A CTCSS tone selects the 'tower' the mobile wishes to activate. The Missouri Highway Department repeaters can be found on 151.040 (St. Louis area), 151.07, and 151.13 Mhz. Now I'm not sure if this was done statewide, but in this area, the local Highway Department station operates from 8 to 5 weekdays (unless it snows). After hours, a "light truck" (traffic signal maintenance) operated on the Highway Patrol channel F1 (unit 689). This particular radio seemed to malfunction quite a bit last winter, so in the winter we're just coming out of, a new system was installed. The Highway Department radio channel 151.040 Mhz. is monitored at the local Highway Patrol headquarters. A receiver on 42.06 Mhz. is located in the 'light trucks' and at the Highway Department headquarters. Now the State Patrol and Highway Department cross monitor, and malfunctions rarely occur. Seems to be rather efficient. Well, I've rambled on enough. On to more important things...

TEXAS

Response has been good to my earlier requests for the ElPaso area. As soon as my friend can verify all the information that has been provided, I'll begin printing it in the column. Here is some additional information provided by KEN (TX-003):
Texas Highway & Public Transportation Department nets:
47.18 Mhz. Channel A, Statewide, Base/Mobile
47.06 Mhz. Channel B, Statewide, Mobile/Mobile
Texas Parks and Wildlife Department net:
159.270, statewide repeaters

From STEVE, (TX-021) Dallas Texas & vicinity:
Fire Department KKN377 Dispatcher is '660' Repeater Outputs:
F1 154.070 Tactical fire fighting, multiple alarms*
F2 154.130 Ambulance Primary ("MICU")
F3 153.890 Fire equipment primary*
F4 154.160 Paging, phone patches, auxiliary for telemetry, tactical for high rise & multi-alarm fires
F6 460.575 Dispatch (alert tones and alarm announcements
*F1 was the primary fire equipment channel until last summer. Equipment problems forced the change to channel 3. Channel 3 is weaker, however, and as channel 1 is repaired, primary operations will undoubtedly revert back to channel 1.
Police Department KKB364 Dispatcher is '531' Repeater Outputs:
F1 460.325 Central Division (Fair Park, Central Business District)
F2 460.375 Northeast Division (Includes Old Renner)
F3 460.500 Southeast Division (Includes Old Kleberg)
F4 460.425 Southwest Division
F5 460.075 Northwest Division
F6 460.175 Traffic Division (Freeway Patrol, DWI Enforcement)
F7 460.275 Information (Subject/license checks)
F8 460.125 Tactical
F9 460.025 Administrative, (Training, special operations)
F10 460.225 Car to Car (Auxiliary dispatch)
F12 460.400 Car to Car (seldom used)
Helicopters (1501-1509) can use any of the above except F4, which is only monitored. Helicopter base is 1515. Helicopters can also operate on Fire channels F1 & F2, and the statewide channels 154.95 and 155.370. One was also heard using 155.670.

Public Safety - Central (continued)

Miscellaneous Services:

153.815	Dallas Transit
153.845	Telephone accessed paging system
153.995	Dallas Transit
155.025	Civil Defense (Tone activated CD sirens)
453.425	Equipment services for city agencies except fire
453.550	Animal Control
453.650	Building inspectors
453.700	Street Dept. Channel 2
453.850	Street Dept. Channel 1 Primary
453.875	Public Works

Dallas County:

Fire	46.380	Dallas County Fire Service (Mutual Aid used by smaller departments
Police	154.995	Sheriff's Mutual Aid with small towns
Police	155.250	Sheriff's Mutual Aid with small towns
Police	155.670	Sheriff's Primary
Police	155.970	Constables

Dallas Amateur RACES Net: 146.880
Weather nets held here during severe and tornadic weather.
In addition to the Texas State Police information provided last month, Steve has provided one additional, a repeater station, 159.09, with input of 154.680 Mhz. Many thanks, Steve, for that enlightening report. Now we're ready for John, Arendt we?

ILLINOIS

Greetings from IL-012. February was a short month here (as elsewhere)- lots of mail kept me busy. Thanks to all of you for your news, views, chit-chat, etc. There were three big highlights of the month and I'll outline them as follows:

1. The end of the month brought the 1980 updated Police Call. As usual, Gene Hughes & Co. have turned in an excellent performance.

2. Feb. 23 brought the RCMA members meeting out at Davenport, Ia. (a summary should appear elsewhere in the Newsletter). It was a pleasure to renew some old friendships, plus meet some of the new members. Thanks are in order to our "Satellite" editors, John Coker and Bill Blomgren, along with Tom Maulding (IL-030) for filling in as moderators for Mike Ravis, who was ill and confined at home.

3. Feb. 24 concluded the weekend with the Davenport Hamfest. Bargains were plentiful - with radio gear plus other items going for good prices. (This author bought a brand new BC-250 at an unusually low price). My advice to the members - when a Hamfest comes your way - go! Take some $ along - you won't come back empty handed.

The combination of all the above items means a short and quickly prepared column, so on to the "main course!"

ILLINOIS DEPT. OF TRANSPORTATION Ken (IL-068) has sent some additional freq. information on in the form of a letter from IDOT headquarters in Springfield:
1. Chicago area IDOT freqs. (repeaters) also in use include 151.070, 151.100, and 453.700.
2. KJK803 is the call sign allocated to the IDOT "Emergency Base" in Springfield. It has capabilities of operating on 47.26 (for communication with MO bases) and also on 47.36 (for communication with IN bases).
WHITESIDE COUNTY AREA LAW ENFORCEMENT FREQ'S. Dave (IL-002) has sent in a list of new freqs. in use coinciding with the changeover of Whiteside SD to a VHF high band system.
155.730 Backup mobile freq. for Whiteside SD.
155.010 Rock Falls PD Base & Mobiles.
154.890 Rock Falls PD Base & Mobiles (Tactical).
154.800 Sterling PD (Detectives).
155.100 Whiteside County Civil Defense.

Although VHF high band is mainly used for the SD operations, the county animal controller and juvenile officers will still be found on the low band "pair" (39.50 and 39.66) until additional VHF high band radios are obtained.

KANKAKEE, IL. AREA UPDATE Vic (IL-015) sent in another long list of freqs. that he monitors and gives out to new scanner buyers as part of his employment. Some of the new freqs. not shown in the Police Call include:
45.200 KSD558 Essex FD Base & Mobiles
155.220 KBK700 Hensons Ambulance Service Base & Mobiles
(The first listing is an expired license still in use; the second listing shows up as "Business" and is thus omitted from the Police Call).
Vic also advises that UHF "Med 2" (also 458.025), "Med 4" (also 458.075), and "Med 6" (also 458.125) are actively used for paramedic work in the area. Most traffic will be found on the "Med 6" combination of freqs.

INDIANA

INDIANA STATE POLICE Mark (IN-014) advises that Pendleton (Dist. 24) and Peru (Dist. 23) have been monitored on "F4" 42.160. This is a standby freq. and is used when the regular statewide freq. (42.420) is quite busy.

INDIANA DEPT. OF NATURAL RESOURCES Jeff (IN-), a frequent contributor to this column, has advised that an additional freq. 159.435 is available for conservation police use, but is only rarely used.

CASS COUNTY, IN. SD Per Mark (IN-014), the correct call sign of the 155.430 rptr. is KLY512. Corrected call signs of KSA813 apply to the "statewide" SD freqs. already in use.

ELKHART, IN PD Larry (IN-010) reports that 155.850 is no longer in use. All activity has been switched to 155.580.

FT. WAYNE AIRPORT Mark also advises that the 155.820 rptr. freq. is assigned to the Baer Field municipal airports. Mobile units are also e/w 155.610 (Ft. Wayne PD "F1").

MISC. SOUTHERN IN. LAW ENFORCEMENT FREQS. Paul (IN-018) sent along a rather lengthy list of freqs. used in the area adjacent to Louisville, Ky. Some new freqs. placed into operation and not shown in the Police Call are:
155.070 Floyd County SD
453.825 New Albany PD "F3"
155.010 Harrison County "Security"
154.540 Floyd & Clark County "Security"
(That last freq. lies in the Business Band, but law enforcement business is probably in order.)

ADDITIONAL IN. HOSPITALS ON "IHERN" Mark (IN-014) has observed several new hospitals on the widely used 155.340 freq.
KRG780 Marion General Hospital (Marion)
KUG729 Duke's Memorial Hospital (Peru)
KGB340 Howard Community Hospital (Kokomo)

WISCONSIN

WISCONSIN STATE SD FREQ. LIST Bob (WI-1) has sent along a rather extensive list of county and major city police agency freqs. - very handy for the vacationer, traveller, etc. A copy is available from Bob for a large SASE plus an extra two 15¢ stamps to offset reproduction costs. Please send inquiries to: Bob Peterson, 1006 S. Dewey St., Eau Claire, Wi. 54701. (Members are asked to allow several weeks for a reply, as Bob is a student with temporary residence in the Twin Cities area).

As this column goes to press, the inquiries are being sent out to IL members about the formation of a "Chicago Area RCMA Chapter". (Of course others are encouraged to participate and possibly attend occasionally). It's been done in Florida and in Oregon - so it could be done here. Let's hope for a favorable response.

With that closing thought - all that's left to say is: Happy Monitoring!

Public Safety - Central (continued)

And I'll conclude this month with some special offers: For a 15¢ stamp (for copying costs) and a self addressed stamped envelope, you may avail yourself of BOB'S (KS-001) Kansas 10-Code list. For 2 15¢ stamps and a self addressed stamped envelope, you may obtain a listing of the St. Louis City Fire Department's radio unit numbers and equipment locations (2 pages). For one 15¢ stamp + a self addressed stamped envelope, you can receive a sheet map of Missouri with State Patrol frequency information, call signs, and troop boundaries. For these great offers, just write to me at the PO box. John and I will be back next month with more!

PUBLIC SAFETY - WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, California (except 7 Southern California counties), Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to: Lyle Galdiera and Bob Gehri, 3205 SW Corbett, Portland, OR 97201.

Send material and questions for the Southern California counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura to: Eric Christensen, 2360 Brentford Rd., San Marino, CA 91108.

No column was received from Lyle or Bob this month. B.A.H.

PUBLIC SAFETY - WEST, SOUTHERN CALIFORNIA - Eric Christensen, Editor

From ERIC (CA-LA-045):

MUNICIPAL FIRE DEPARTMENTS-Within Orange County

ANAHEIM (Station 66) 46.26 MHz

Stn.	1	500 E. Broadway (Headquarters)
	2	610 N. Brookhurst
	3	1563 S. Manchester
	4	2736 W. Orange
	5	1154 Kreamer
	6	1330 S. Euclid
	7	2222 E. Ball
	8	111 N. Pinney
	9	6300 E. Knoll Ranch

COSTA MESA (Station 84) 46.44 MHz

Stn.	1	111 Rochester
	2	800 Baker
	3	2803 Royal Palm (Headquarters)
	4	2300 Placentia

LAGUNA BEACH (Station 85) 46.16 MHz

Stn.	1	501 Forest (Headquarters)
	2	285 Agate
	3	2900 Alta Laguna

ORANGE (Station 73) 46.26 MHz

Stn.	1	176 S. Grand (Headquarters)
	2	2900 E. Collins
	3	1910 N. Shaffer
	4	201 S. Esplanade
	5	1345 W. Maple
	6	3810 W. Chapman

BREA (Station 62) 46.32 MHz

Stn.	1	555 N. Berry (Headquarters)
	2	495 S. Brea
	3	(Proposed)
	4	170 Olinda

BUENA PARK (Station 63) 46.26 MHz

Stn.	1	8081 Western (Headquarters)
	2	7780 Artesia
	3	9120 Holder

FULLERTON (Station 64) 46.32 MHz

Stn.	1	312 E. Commonwealth (H.Q.)
	2	1732 W. Valencia
	3	700 S. Acacia
	4	3251 N. Harbor
	5	2555 Yorba Linda
	6	1500 N. Gilbert

LA HABRA (Station 61) 46.32 MHz

Stn.	1	850 W. La Habra (H.Q.)
	2	520 S. Harbor

SAN CLEMENTE (Station 86) 46.16 MHz

Stn.	HQ	100 Avenida Presidio (H.Q.)
	2	670 Los Mares

STANTON (Station 75) 46.26 MHz

Stn.	HQ	7871 Pacific

NOTE: Cities within the "Net 6" Fire Net, Garden Grove F.D., Santa Ana F.D., and Newport Beach F.D. have already been published in earlier issues. Cities not shown here contract to the Orange County Fire Department for fire services. (Dispatching: 46.14 MHz "Station 91")

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Fire Dept. equipment numbering systems desired for above listed depts. and other fire depts. in Southern California. ERIC (CALA045)

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From ERIC (CA-LA-045):

El Monte Fire Department — Fire Chief Charles Masten

Station 1: 3615 Santa Anita····Headquarters & Communications site

Rescue 21	Squad	Chief 21	Fire Chief
Engine 21	4 man eng. co. # 1	Engine 25	Reserve eng.
Truck 21	4 man truck co.	Utility 22, 27	Pick ups

Battalion 21, 22, 23

Station 2: Peck Road @ Bryant

Engine 22	4 man engine # 2	Car 27	Station Wagon
Engine 24	Reserve engine		

Station 3: Cogswell @ Lansdale Ave.

Engine 23 — 4 man engine # 3

Radio System-El Monte Fire Dept. KCE468

Freq. 1	154.37 MHz.	"RED"	Arcadia, Monrovia, S.Madre
Freq. 2	154.28 MHz.	"WHITE"	State fire mutual aid
Freq. 3	154.085 MHz.	"BLUE"	El Monte Fire Dept. operations
Freq. 4	154.34 MHz.	"VALLEY"	Los Angeles Co. Fire Dept.

From JIM (CA-SB-005):

POLICE DEPARTMENT-City of Riverside — Beat Numbering System

Freq. 1	460.175 R	Basic Dispatch
Freq. 2	460.300 R	Information & Records checks
Freq. 3	460.325 R	Tactical channel
Freq. 4	460.475 R	Supervision

Beat Numbers	Areas Covered
8	East of SR-91, North of SR-60
13, 16, 19	South & Southwest of SR-91 to city limits
2	West of SR-91, North of SR-60
11, 15	North & East of SR-91 to Arlington, West to Van Buren
14	East of SR-91, South of Central, N. of Washington
12	West side (Riverside Airport area)
17, 18, 20	South, South Central, & Southwest (La Sierra and surrounding areas)
5, 6	South Central, West of SR-91
1, 3, 4	Downtown, West of SR-91
7, 9, 10	Downtown, East of SR-91 to SR-60

NOTE: SR-91 (H-91) is the Riverside Freeway
SR-60 (H-60) is the Pomona Freeway

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From THOMAS (CA-LA-162):

Los Angeles County Sheriff-Altadena Station # 7

Unit Numbering System

Unit #	Area of Service
71	Fair Oaks w/to Arroyo Seco
72	Lake St. w/to Fair Oaks
73	Altadena Dr. w/to Lake New York Dr. to North
74	New York Dr. s/to Pasadena city limits
75	Mesa & Glenn (Pasadena) areas
76, 77	extra units as assigned

NOTE: North boundary is USFS Angeles National Forest
South boundary is City of Pasadena city limits

RADIO: Altadena Station operates on LASO Freq. 15 (39.82B/39.34M)
Car to Car traffic uses Freq. Charlie (39.48 MHz), Freq. Henry (39.60 MHz), and Freq. Edward (39.72 MHz).

From BOB (CA-OR-058):

The Los Angeles County Sheriff's Department is currently using 470.8875 MHz experimentally at the Lakewood Substation. This frequency is simulcasting Freq. 12 (39.64 MHz Base), with everything including the "infamous" beep tones! 470.8625 MHz is now being used by several units.

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From JIM (CA-LA-094):

POLICE DEPARTMENT-City of Culver City
Unit Numbering System

Freq. 1 156.09 KMA394
Freq. 2 155.985 KMA394
Freq. C 154.92 KMA394

Unit numbers have the number "1" followed by an alphabetical identifier, followed by the beat area. (1A52, etc.)

District 1 (51) LaCienga to Overland; Washington to Jefferson.
District 2 (52) Washington to Culver Blvd; Overland to Lincoln.
District 3 (53) Culver Blvd. to Slauson; Overland to Sautelle.
District 4 (54) Slauson to Centenella; Sepulveda to Buckingham Way.
NOTE: Units 56 & 57 are overlap cars, 55 is a report car.

"A"	2 man patrol	"L10"	Lieutenant
"C"	Cadet	"L20"	Sergeant
"E"	Executive	"L30"	Sergeant
"E1"	Chief	"P"	Parking Enforcement
"E2"	Asst. Chief	"R"	Fugitive Detail
"F"	Undercover	"TL"	Traffic
"J"	Juvenile	"TL20"	Traffic Sergeant
"K"	Investigations	"TL21"	Traffic Supervisor
"L"	1 man patrol	"TL22" thru "TL27"	Traffic Officers
		"X"	Special Unit

Editor's note: Jim has sent in a great deal of excellent information, much of which has been printed in this section and also in the "Business, etc." of the RCMA Newsletter. In his last letter to me, Jim informed me that he was moving from Southern California to Hamburg, Arkansas. Jim, all I can say is best of luck "down south there" and that we will all miss your excellent contributions to P.S. West-Southern California. THANKS AGAIN. ERIC (CALA045)

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From DWAYNE (CA-OR-):

POLICE DEPARTMENT-City of Huntington Beach
Unit Numbering System

Frequency: 460.100 R MHz
"Station 42"

"A"	2 man patrol	"K"	K-9 units
"C"	1 man patrol	"M"	Motorcycles
"D"	extra patrol	"N"	Narcotics
"G"	Parking control cadets	"R"	Robbery
"I"	CSI-Crime scene investigations	"S"	Sergeants
"T"	Traffic	"V"	Vice
"Y"	Downtown area foot & pier patrol (4 wheel vehicles)		

26 S	Sergeant-areas 2-6	913 S	Sergeant-areas 9-13
37 S	" " 3-7	213 S	" " 2-13
812 S	" " 8-12		

05 M	Motorcycle Sergeant	03 U	Watch Commander
HB 1	Helicopter		

CODE 19: No units available to handle call.
CN (Call number) On all calls dispatched to a unit, a corresponding teleprinter message is sent to the responding units. On some calls only a teleprinter message is sent to the units with NO voice radio message, thus reducing radio traffic.

Watch 1: 0100 to 1100
Watch 2: 1500 to 0100
Watch 3: 1100 to 2100
Watch 4: 2100 to 0700

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From RON (CA-VE-013) Formerly CA-LA-060:

I recently moved to Ventura County and would like to report on the C.H.P. system in use here, as it is slightly different from what I previously encountered living in L.A.

"VENTURA" # 31 "Purple" 42.40 B/42.16 M MHz. 155.445 MHz. WCT317
Red Mountain KMB521 Primary 154.695 MHz. WCT316
South Mountain KME354

The differences that I have noted are that I can monitor mobiles on 155.445 MHz. and occasionally "Ventura" on same. I assume this frequency is used to relay the mobile transmission from KMB521 to "Ventura". In other words, mobiles transmit to the mountain top receiver on 42.16 MHz. which is then relayed to "Ventura" via VHF high band on 155.445 MHz. What I don't seem to be able to comprehend, is how I can occasionally hear "Ventura" on the same frequency. I can however monitor "Ventura" on 154.695 MHz. a little less frequently, which leads me to

believe they have the ability to open or close this circuit. Again, I assume "Ventura" transmits to KMB521 on 154.695 MHz. which is then re-broadcast on 42.40 MHz. to the mobile units. I would appreciate further input on this type of system from other members who are more familiar with it.

One additional item is that Police Call Volume # 9 shows a license for repeater operation on 453.675 MHz., KIB530 Ventura. I have monitored this on occasion with negative results. Any member have ideas on this one?!

Also from RON (CA-VE-013):

As of January 1, 1980, the City of Ojai now contracts with the Ventura County Sheriff's Office for services. All units switched from 158.835 MHz. to 159.21 MHz. Unit numbering has changed from "6--" to "1 Adam" & "1 Boy".

Update to Ventura County Sheriff Department Unit Numbering System (Feb/Mar 1980)

"1" Assigned to City of Ojai units. (1 Adam, 1 Boy, etc.)
"2" Administrative Division
"5" Special Services Division; Detectives
"6" Custody Division
- "6A" Custody Administration
- "6B" Honor farm, Ojai
- "6F" Womens' Jail Facility
- "6L" Main Jail Watch Commander
- "6R" Main Jail-Deputies
- "6S" Main Jail-Sergeants
- "6T" Transportation (inmates)
- "6 Ocean" VCSO Branch Jail, Oxnard

"7A" Civil Division
"7F" Bureau of Identification

"3A" Also Oakview, Casitas Springs and north to Rincon, Rose Valley (Patrol)
"3B" Also unincorporated Fillmore & unincorporated Santa Paula (Patrol)
"3C" Also unincorporated Camarillo, South coast north from Malibu, beaches, Oxnard Plains. (Patrol)
"3D" Ventura Ave., Saticoy, El Rio, Siver Strand, Montalvo, unincorporated Ventura (Patrol)
"3W" Lockwood Valley (Patrol)
"R" Rovers, can go anywhere within the area.
"X" Special Enforcement Detail, unmarked patrol.
"5Z" Bomb disposal unit

VENTURA COUNTY-Countywide Department Numbering System

Station 1:	Ventura County Sheriff H.Q.	Station 6:	Not in use-was Ojai Police
" 2:	Ventura Police Department	" 7:	Ventura S.O. Ojai Honor Farm
" 3:	Oxnard Police Department	" 8:	Port Hueneme Police Dept.
" 4:	Santa Paula Police Department	" 9:	Simi Valley Police Dept.
" 5:	Fillmore Police Department	" 10:	Ventura S.O. East Valley Stn.

VENTURA COUNTY-Countywide Law Enforcement Radio System

Station 1	Freq. 1	159.21	Station 4	Freq. 1	158.835
	Freq. 2	158.73	Station 5	Freq. 1	158.835
Station 2	Freq. 1	155.31	Station 8	Freq. 1	155.655
	Freq. 2	155.625		Freq. 2	155.310
	Freq. 3	155.955		Freq. 3	156.090
Station 3:	Freq. 1	155.655	Station 9	Freq. 1	158.805
	Freq. 2	155.745		Freq. 2	158.835
	Freq. 3	155.310			

NOTE: C.H.P. Helicopter "H8" has been heard on 159.21 (VCSO Freq. 1) from time to time assisting them.

Editor's note: VCSO's Freq. 1 (159.21 MHz.) is also used by San Bernardino County Sheriff as a repeater frequency from Crestline. Freq. 2 (158.73 MHz.) is also used by Sierra Madre Police Department (east of Pasadena), Indio Police Department (with a repeater) and San Diego Police Department, Freq. One (also with a repeater). The C.H.P. Ventura "Purple" frequency, 42.40 B/ 42.16 M MHz. is also used by C.H.P. Santa Ana. From my house in the Pasadena area, I can receive BOTH Santa Ana and Ventura CHP dispatch centers.

Any comments? ERIC (CA-LA-045) By the way, Ron-an excellent contribution. THANKS.

Editor's note: CHP Ventura dispatches the southern section of CHP Santa Barbara's district on the "GREEN" channel (42.54 B/42.24 M MHz.) CHP San Louis Obispo dispatches the northern section of Santa Barbara's district, reportedly also on the "GREEN" channel. San Louis Obispo CHP operates on the "WHITE" channel.

Information in the need: Does anyone know if CHP Bishop and CHP Bridgeport areas are still operating on the "BLUE" channel (42.34 B/42.18 M MHz.)? How about CHP El Centro? I have received several requests for CHP unit numbering/

beat numbering systems for the following areas, but I don't have the information, and no one else has sent it in. If any members have this information, OR can get it, PLEASE advise me/and-or send it to me for publication in up coming issues. Please send info re: CHP Santa Ana, CHP San Diego, CHP South Los Angeles, CHP Newhall, CHP Barstow, CHP Ventura, CHP Ontario, CHP Baldwin Park, CHP Glendale, CHP West Los Angeles, CHP West Valley, CHP Malibu. Whenever someone sends in this info, I'll print it, but until then, we'll all just have to suffer & do without. Do any of the L.A. City Fire buffs have a complete lineup of the L.A. City Fire Dept. stations & equipment? I've received several requests for this information. Send anything you might think might be of interest to other members to: ERIC (CA-LA-045), 2360 Brentford Rd., San Marino, CA. 91108. THANK YOU!!!

Jeff Harris is a monitoring fan (CA-OR-073) & a ham (KA6IGT), who is trying to start an "RCMA Net" meeting on the airwaves in the So. Calif. area on the 146 to 148 MHz. ham band. If your'e interested in listening to and participating with RCMA members on Amateur Radio, see this issue's "CONTACT" section for details. Editor's note: I'm also an amateur (KA6IHT) and am assisting Jeff with this project. When you write in to either of us, please enclose an SASE. THANKS. --73's, ERIC (CA-LA-045). or try 147.765 R

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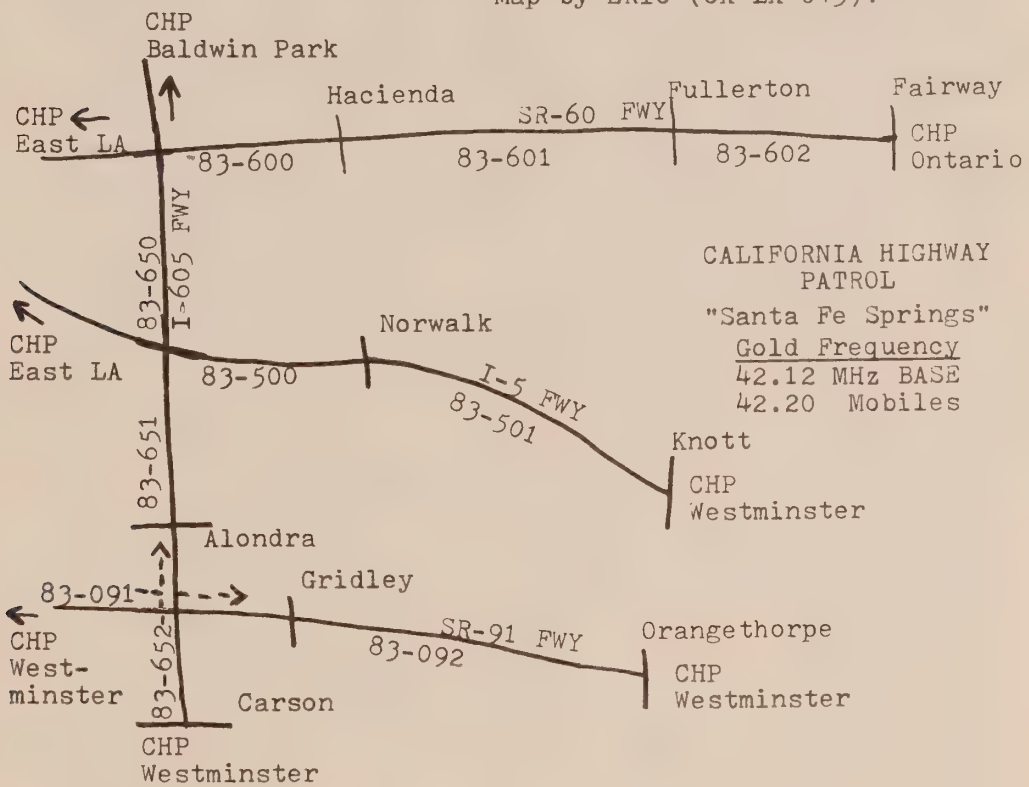
Map by ERIC (CA-LA-045):



CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to: Rory B. McEvoy, 12 Castlegrove Blvd., Unit 9, Don Mills, Ontario, M3A 1K8; (416) 449-4170 weekends and 7-11 PM EST/EDT weekdays ex THURS.

Canada's Back! To all of you who have been disappointed to see no Canadian column for the past few months, I must apologise sincerely. To the majority who have provided no input at all, I'm ashamed and disappointed in you.
I have received input from three members in Ontario, two in British Columbia and one each in Alberta and Quebec. Some of you have sent great frequency data, a few have phoned me while others have simply sent photo copies of published lists. We can't reproduce published frequencies in the newsletter as this would be a copyright infringement. Also and more important is the fact that many published frequencies are either inaccurate or invalid. Some frequencies being reported appear to be images - particularly those around 163/164 mhz. If you are receiving images please do state so, and tell me what your receiver's i.f. is so that the correct frequency may be determined.
There have been several phone requests to me for R.C.M.P. frequencies, and information on how to receive them. Here I must reiterate previous statements for the benefit of new members. Other than those frequencies used purely for local law enforcement in provinces outside of Ontario and Quebec, R.C.M.P. frequencies are confidential. In particular this applies to almost everything below the 2m ham band. Some are well known and published occasionally but other lesser known and seldom used ones may at times involve national security. So please, don't ask for sensitive frequencies because (a) I may not have them, and (b) unless the member is personally known to me as a bona-fide hobbyist I will not even consider revealing such data.
Here in Southern Ontario the big question has been our missing snow. While California "bathes" in inches of rain we are freezing in minus 6° f weather, but no snow. The MTC and snow-plow fans still have lots to listen to however. These are on 143 and 150 mhz in this area. A more detailed list later. It is worth noting that 150.185 appears to be a central control used for wx reports from bases to H.Q. and also between vehicles and bases. There appears to be a regular schedule for bases to report local conditions between 12.20 am and 12.40am; a great time to get call signs andlocations. Most MTC call signs are XLS plus a three digit number.
As many of you no doubt know, CRB has published it's registry of Canadian Scanner Frequencies. Most of the POSITIVELY identified frequencies have already appeared in previous newsletters. Whether it's worth $5 is very much a matter of opinion. One fact remains very clear though. CRB has unwittingly done all Canadians a great favour because the actual existence of their guide has given a boost to the true legality of our hobby.
Some items occasionally come to my attention which should be dealt with in other columns and I usually pass these to the respective editors. Those which have particular interest to Canadians will also be mentioned here. Today we have the great Bearcat mystery. In July 1979 I received a letter from Samuel J. Martin, Manager, New Products, Electra Bearcat promising a "Canadian Version" of their scanners to receive 138-144mhz. We await this with eager interest but also need coverage of 406-420mhz. The BC220 is advertised in an English magazine, "Practical Wireless" with a frequency range of 66-88mhz in place of 30-50mhz! Now would'nt it be good if Electra gave us the option of interchangeable microprocessors - just like xtals, to cover the bands/ranges we want!!!
The March issue of "CB Magazine" has just arrived and it seems that Gordon West has performed a great service for our hobby and RCMA with this excellent issue. Thank you also for the Canadian coverage on page 28. One point that should be made more clear is the reference to 411mhz in 1976. This actually refers to the security services for the Montreal 1976 Olympics! Sorry if I confused anyone out there.
Here is an important message for our U.S. members visiting Canada, especially by car. As of May 1980 you no longer need

a Department of Communications permit to operate your 27mhz CB in Canada. However, please note that at the present time neither the 49mhz 100mw "toys" or the 462mhz GMRS are legal for use in Canada. For those who may wonder about this, the 49mhz frequencies are used for vital hydro services in Ontario while 462mhz is used by police in Alberta.
A certain model of 2m amateur is capable of tx/rx over the range 140.000 - 149.995 mhz. The writer has personally heard, observed and witnessed (at the same time) a licenced Canadian amateur (advanced class!) transmitting on an ambulance channel. Perhaps it's time some form of type acceptance was required for amateur gear to discourage such abuse of priviledges!
I'm sorry to get things out of context here. A few minutes ago while talking to a contact at the DOC the question of scanners came up (it always does!) and the latest word or opinion expressed isthat they are legal provided they are "capable of receiving 162.475." No, you don't have to tie up a channel but if you have a crystal set it is suggested that you have a wx xtal available for it.
Now to some frequencies of interest --

BB	ADT Security, Toronto, Ontario		XMY 311	155.310
BB	Bank of Nova Scotia,Toronto		XNX 640	167.700
PD	Barrie, Ontario			142.110
PD	Barrie, Ontario			142.635
PD	Belleville, Ontario			142.035
PD	Belleville, Ontario			141.875
PF	Beauport,Quebec		XJG 616	155.280
FD	Brockville,Ontario		XJI 97	154.430
FD	Brant County,Ontario		XJG 28	153.830
FD	FIRE MARSHAL,British Columbia			155.460
PF	Charlesbourg, Quebec			155.730
FD	Chatham,Ontario		XJK 307	154.680
PD	Durham Regional, Oshawa, Ontario		XJK 343	142.185
PD	Durham Regional, Oshawa, Ontario		XJK 343	142.590
PD	Durham Regional, Oshawa, Ontario		XJK 343	142.620
PD	Durham Regional, Oshawa, Ontario		XJK 343	142.815
PD	Durham Regional, Oshawa, Ontario			143.100
FD	Delhi, Ontario		XJJ 308	154.340
FD	Durham Region		XJI 72	153.860
PD	Essex Co. Municipalities Central Dispatch			142.335
FD	Essex County, Ontario		XJG 97	153.770
FD	Grey County,Ontario		XJF 350	154.130
BUS	Hamilton Transit, Ontario			153.650
FD	Halton Region, Ontario		XJF 649	154.160
PD	Haldimand-Norfolk Region, Ontario			142.170
PD	Haldimand-Norfolk Region, Ontario			142.740
PD	Haldimand-Norfolk Region, Ontario			142.800
AMB	Minden Ambulance, Minden, Ontario		XNF 935	149.440
AMB	Minden Ambulance, Minden, Ontario		XNF 935	150.100
FD	Montreal, Quebec	Ch.1	XJG 69	412.7625
FD	Montreal, Quebec	Ch.2	XJG 69	412.4875
FD	Montreal, Quebec	Ch.3	XJG 69	413.2625

****

GLENN COHEN CASM002 HAS JUST REPORTED THAT HIS STORE SCANNERS UNLIMITED HAS BEEN HIT WITH A LOSS OF:

1 *BEARCAT* 300 — *SERIAL NUMBER* 5311
6 *BEARCAT* 220
5 *BEARCAT* 250 5000 *M*TRON CRYSTALS ✓
4 *BEARCAT* 210
4 *REGENCE M*100

GLENN IS OFFERING A 500 *DOLLAR REWARD FOR INFORMATION LEADING TO AN ARREST. SEND ANY INFORMATION TO GLENN COHEN* 3816 *BERESFORD ST SAN MATEO CA*, 94403 (415) 537 1624
(ADDITIONAL SERIAL NUMBERS WILL FOLLOW NEXT ISSUE)

FEDERAL GOV'T and ☆ MILITARY ☆

Robert B. Grove, Editor

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to: Robert B. Grove, Route 1-Box 156, Brasstown, NC 28902. Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

SOME GOOD NEWS.... Several publications of interest to RCMA members have been called to my attention. Michael LeCompte of Quebec City advises our Canadian members of the magazine "Intercom", published as a training and information magazine for the Canadian Forces Communications Command. Michael advises that "Intercom" may be restricted to military personnel. Their address is Communication Command HQ, DND Computer Centre, Tunney's Pasture, Ottawa, K1A OK2. Thanks, Michael!

Mark (IL-008) advises of six military magazines listed in the World Aviation Directory: Air Force Magazine, 1750 Pennsylvania Ave., N.W., Washington, DC 20006; Armed Forces Journal, 1414 22nd St., NW, Suite 603, Washington, DC 20037; Army Aviation Magazine, One Crestwood Road, Westport, CT 06880; Air Force Times, Army Times Publishing Co., 475 School St. SW, Washington, DC 20037; and US Army Aviation Digest, Dept. of Army Publications, US Army Aviation Center, Ft. Rucker, AL 36362. We appreciate Mark's donation.

Member Bob Gehri has just published his 1980 Police and Fire Frequency Listing for Northwest Oregon and Southwest Washington. It contains some 25 pages of public safety frequencies and codes, marine, emergency, news channels, aircraft, and other useful information. For further information, send an SASE (or $6.95 for the publication) to Police and Fire Frequency Listing, P. O. Box 17221, Portland, OR 97217.

One member wished to register his doubt as to whether our columns should announce new commercial products since advertising space is available. My personal feeling is that any new product which would be of interest to our members should be objectively brought to their attention, but promotion should be confined to paid advertising. I would be happy to hear from other members concerning their feelings about this.

Clint (PA-031) believes he can answer Ed's (MA-017) question in our January column regarding abbreviated references to radio controls heard on the air. Clint suggests: SL (search lock), SLM (manual--one channel), SLS (search and/or scan); ECC is always referred to in conjunction with a base console or repeater; ECC-1 would be channel one in repeater mode. The exact abbreviation is unclear. Clint also advises that the FBI is now set up for scrambling in Pennsylvania. It has a warbling sound, but isn't digital. Thanks for the interesting information, Clint.

AND SOME BAD NEWS.... Some months back, we advised our readers of the impending release of a series of "Scanverters" from Hermest Research and Development in St. Petersburg, Florida. A telephone call to them revealed that the owner and principal engineer, Carl Spangenberg, has died. Mrs. Spangenberg advises that the company will probably close.

A NEW SCANNER WITH EXTENDED COVERAGE Radio Shack has started shipping their new PRO-2008, an 8-channel programmable which goes down to 410 MHz on UHF! It will be interesting to see what the Treasury Department says about this one! We are awaiting a sample for evaluation. Preliminary data shows that it is a low-cost ($259) unit without search.

Rick (CA-SF-002) sent an interesting article from the New York Times (Feb. 16, 1980) which discusses a patent issued on a voice privacy system to be used on satellites. Apparently it was delayed for some time due to security problems with NSA. Thanks, Rick.

Federal/military cont.

We earnestly appreciate the large number of frequency contributions received this month, and hope that members will continue to send them in. We will publish all submittals which are not sensitive, and reply personally to those members who enclose a self-addressed stamped envelope with their queries.

From Craig (ME-001) Loring Air Force Base
149.565 Administrative Command Post mobile repeater
163.4875 Base security
165.0125 Base maintenance; snow plows, etc.

From Craig (CA-VE-011), forwarded by Eric (CA-LA-045) Angeles National Forest
164.9125 South zone
166.5625 South zone regional assistance
169.200 Air attack channel
171.575 KME22 Burnt Peak repeater
172.375 repeater input
415.225 point to point link

Craig has a breakdown of ranger districts by tactical designator; send an SASE to him for information. Thanks Craig and Eric!

From Dewey (CA-LA-217)
407.5625 wideband multiplex channel (no agency determined)
413.000 US Navy, San Diego "Med Control"
413.2375 US Army Corps of Engineers (SSB reported!)
418.300 USPS security, KGB 671

From Chuck (MD-004) Annapolis, MD.
36.71 US Army MP's at Ft. Myer, VA and Ft. McNair, Washington, DC
164.445 US Army MP's at Arlington Hall Station, VA

From Ken (IL-069)
34.86 Crab Orchard National Wildlife Refuge, Carterville
170.875 Marion Federal Prison (nationwide allocation....ed.)

From Joe (MD-015) Corrections for earlier list sent Washington, DC
166.725 Ch. 1 Dispatch KGB788 (all channels) US Park Police
166.925 Ch. 2 Dispatch (main)
167.075 Ch. 3 Car to car
166.850 Ch. 4 special events
164.800 Ch. 1 US Capitol Police KGD238
164.625 Ch.2

From Joe (MD-002) Nationwide pot-pourri! (continued from last month)
164.725 Gettysburg, PA Park Rangers (also Cape Hatteras Nat'l Seashore..ed.)
165.0625 Aberdeen Proving Grounds, Maryland police (nationwide Army security..ed)
165.0875 Walter Reed Army Hospital Fire Dept., Washington, DC (also security at Ft. Knox, KY; Ft. Monmouth, NJ; Ft. Benning, GA...ed)
165.1875 Aberdeen Proving Grounds, MD (paired with 170.125; also Rock Island Arsenal, IL; Ft. McPherson, GA MP; USAF Florida statewide maintenance..ed)
166.325 US Park Police, New York City Gateway Recreation Area (also allocated in states of UT, WA, OR, OK, TX, NJ, MT, IN, and MN...ed)
166.350 US Park Service Ft. McHenry National Shrine, Baltimore, MD
166.475 US Forest Service, Ouchita, AR (also Wyoming, Paired with 164.875...ed)
168.550 US Park Police, New York City, Gateway Recreational Area (ch.4)
169.0375 Smithsonian Institution, Washington, DC security channel 2 (simplex)
169.200 Smithsonian Institution, Washington, DC security channel 1 (simplex)

From Rickey (NJ-001) Some interesting low-band military and government skip.
37.19 Military base operations; mixed Spanish and English traffic
40.31 Navajo Indian reservation, Arizona network
33.90 National Guard operations
34.00 Military (possibly US Navy...ed)
34.30 Military tactical calls (probably US Navy..ed)
38.35 Air to ground war games (probably US Marines or Navy..ed)
45.70 Army Reserves

NOTE: Will the member who submitted a xerox copy of a nicely hand-lettered list entitled, "WASHINGTON DC AREA TWO WAY RADIO FREQ'S" please drop me an SASE? I have made scores of notes for you, and lost your name and address!

Federal/military cont.

From George (WI-004) and Tom (WI-006) Milwaukee area (reported as actually heard)

41.06	FCC
143.46	USAF MARS repeater (148.125 input)
148.01	US Army MARS simplex
148.41	US Navy MARS repeater (150.09 input)
148.15	CAP repeater (143.90 input)
148.29	Great Lakes Naval Base fire
149.37	Great Lakes Naval Base "Trouble Base"
149.45	Great Lakes Naval Base Police repeater (148.95 input)
150.00	Satellite (probably USN TRANSIT or Russian COSMOS...ed)
150.100	Great Lakes Naval Base VA paging
163.200	US Marshall
163.4625	USAF, SPD-440th Security
163.4875	USAF, Mitchell Control 128th security
163.5125	USAF, crash control, 128th
163.5875	USAF maintenance, 440th
165.1375	USAF maintenance, 440th
164.175	VA paging, Woods Hospital
166.225	USPS mail trucks
168.525	VA security, Woods Hospital
173.5875	USAF crash and fire, 440th
409.000	US Coast Guard data channel
413.875	US Geological Survey paging
415.200	GSA Protection Service repeater (413.950 input)

I am sure that many members wonder why months seem to go by after they submit frequency lists in good faith to their respective editors without seeing them published. I would like to reassure our contributing members that all submittals are gratefully solicited, and that delays are caused primarily from space limitations and the fact that columns are made up some two months before publication!

NEW BAND? An FCC note indicates active consideration of the 216-220 MHz band for communications on the inland waterways. More should be announced in the months to come.

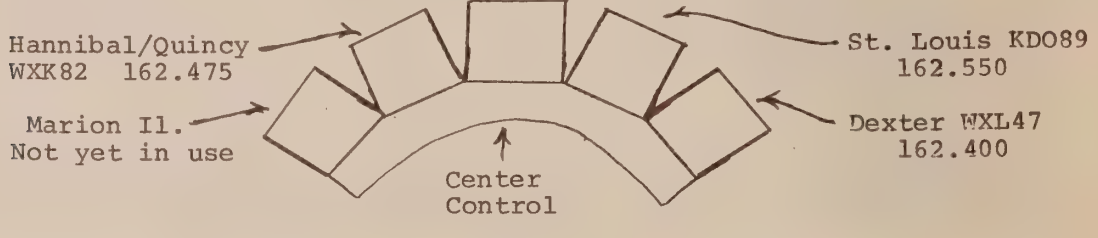
That's it for this month. May I express my sincere thanks to those conscientious members who have been submitting their frequency lists, and additional thanks to those members who include an SASE with their questions! See you next month!

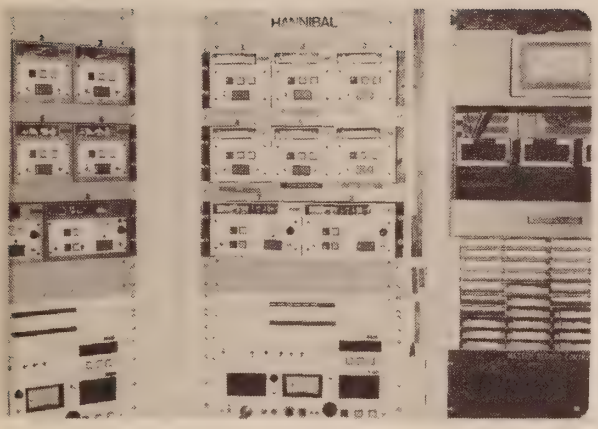
photo department

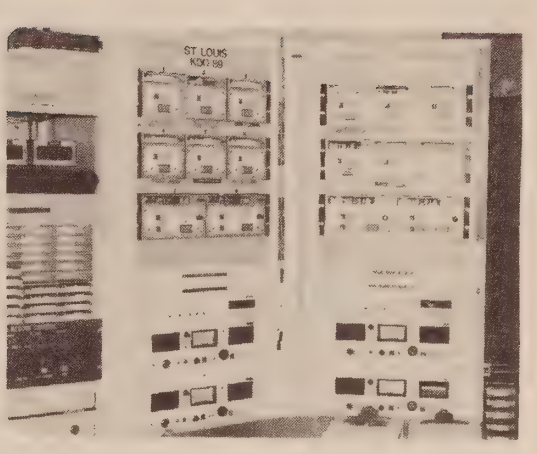
Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to: Mike Redman, P.O. Box 1177, St. Charles, MO 63301.

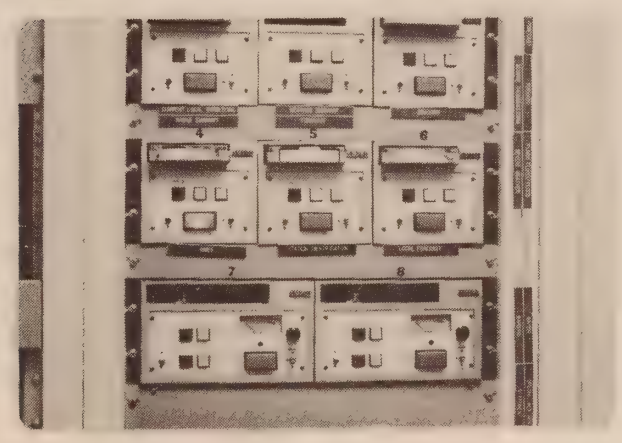
NOAA WEATHER RADIO, ST. CHARLES, MO.

This month, I decided to take a short trip to the National Weather Service Office in St. Charles. The result was this photo story. Probably all of us are familiar with NOAA Weather Radio. These are the radio control units that make it all possible. Below is a drawing of the radio configuration:









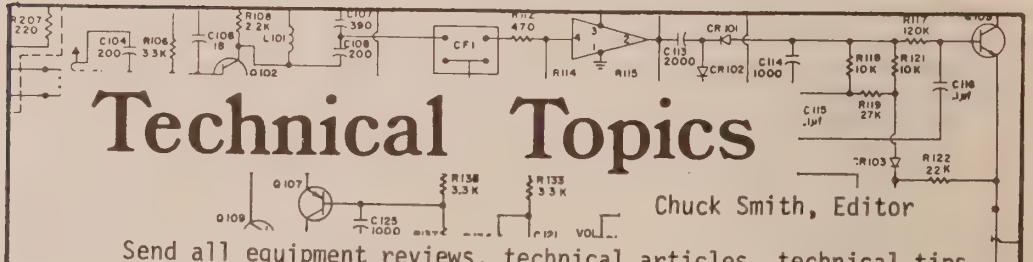
We're all familiar with the NOAA Weather Radio Service, but here are a few basic facts for our newer members. Frequencies in use nationwide include 162.400, 162.475, and 162.550 Mhz. Continuous twenty-four hour broadcasts are made in most areas, with severe weather bulletins broadcast as needed, and preceded by a tone alert signal of 1050 Hz. Each segment of the continuous broadcast is prepared on a separate cartridge. These can be updated and changed at will. There are a number of 'standard' pre-recorded cartridges for such things as "Tornado safety rules", "Blizzard protection rules", etc., that are inserted during severe weather periods. Severe weather alerts are first broadcast 'live', then taped, and the cartridge added to the sequence. A tape can be made while the regular continuous sequence progresses- the deck need not be stopped to make a recording. The warning alerts are tested periodically. In this area, it is 11:05 AM, each Wednesday. This is a good time to test your receiver, if tone activated. Advertised range is 40 miles from the transmitter site, although this can be increased with the proper outside antenna. The stations controlled from St. Charles each have 1000 watts of power, and are fed through phone line to the transmitter site. The St. Louis station, KDO89, is located in Shrewsbury.

Photo Department (continued)

Three stations are operated from the St. Charles office, with a fourth, in Marion Illinois, planned. The four racks and a center control rack are located in a semicircle, which was difficult to show in a photograph, but easy in a drawing. I have placed two photos side by side, and I apologize for the overlap, but this should help you to relate to the system. Decks 7 and 8, in the lower sections of each rack, are for recording. The upper six sections are playback decks. These are clearly shown in photo 3. Status lights show the condition of each tape, and also recognize failure of the system or lack of audio. Magnetic 'tape identifiers' are placed beneath each deck to identify the tape being used. The far bottom of photos 1 & 2 show the recording controls. The center rack, shown half in photo 1 and half in photo 2, contains a "live broadcast" light, recorders that record five minutes of each hour for supervisory review, blank tape racks, and the master recorder selector. It is possible to broadcast on all stations simultaneously, but has never been done. Far to the right of photo 2 can be seen the standard pre-recorded tape rack. In photo 3, on the closeup of decks 7 and 8, one can see the 'end cue' and 'trip cue' controls. These are recorded onto the tape, and tell the machine when to start and when to stop, so broadcasts are indeed conrinuous with no lapse netween cartridges. Here are the counties covered by each broadcast station:

KDO89 St. Louis	WXK82 Hannibal	WXL47 Dexter
Franklin Mo.	Lewis Mo.	Bollinger Mo.
Jefferson Mo.	Marion Mo.	Butler Mo.
Lincoln Mo.	Monroe Mo.	Cape Girardeau Mo.
St. Charles Mo.	Pike Mo.	Dunklin Mo.
St. Louis Mo.	Ralls Mo.	Mississippi Mo.
Warren Mo.	Shelby Mo.	New Madrid Mo.
Calhoun Il.	Adams Il.	Pemiscot Mo.
Greene Il.	Brown Il.	Scott Mo.
Jersey Il.	Pike Il.	Stoddard Mo.
Madison Il.		Wayne Mo.
Monroe Il.		
St. Clair Il.		

Many thanks to Sue Touzinski of the National Weather Service for her help with this story. Now what photos have you to send? These were made with a Pentax on Plus X film. See you next month!



Technical Topics

Chuck Smith, Editor

Send all equipment reviews, technical articles, technical tips and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions or even computer applications for monitoring to: Chuck Smith, 4901 Heil Ave., #3C, Huntington Beach, CA 92649.

MEET THE PRO-2008, RADIO SHACK'S NEW PROGRAMMABLE SCANNER:

Radio Shack's new programmable scanner, the Pro-2008, was previewed by Gary Mondfrans at the February meeting of the Bay Area Scanner's Club. The unit is small in size, about that of a Bearcat programmable, and could be perfect for mobile installation. The unit has eight programmable channels (w/o search) which are programmed in an improved fashion from that of it's daddy, the Pro-2001 (the program button steps to each channel instead of having to go back to manual then program, etc.). The units' volume was quite good (though the Pro-2001 still has the loudest volume going), clear and with hardly any synthesizer noise, even on UHF! The unit can even be programmed to go below 420-mHz, with the UHF band being 410-512 mHz. Either those rumors about non-certification by the FCC of units going below 420 are incorrect or Tandy has more clout than Uncle Charlie.

The unit is attractively packaged in a woodgrain metal cabinet, and comes complete with a built-in antenna. Only1rear antenna input is provided however; Radio Shack has apparently abandoned it's commendable practice of split VHF/UHF antenna inputs. The unit also features a reset button in the rear which will wipe out all programmed channels in a pinch -- a nifty feature should monitoring laws become more restrictive! A headphone jack is conviently located up front.

The green display shows the channel number, the separately programmable "d"-DeLaY, a "." if the channel is locked out, and displays a "-" while the units is being programmed between the channel number and the frequency. Frequency ranges 30-50 on low band, 144-174 on hi (covering the 6 m. Ham band) and 410-512 on UHF. Sensitivity is 1.0μv on VHF and 2.0μv on UHF according to published specs. However most Radio Shack scanners can be "tweaked" up quite easily.

Radio Shack is not yet advertising the Unit, this in marked contrast to other manufacturers who promote their new scanner's up to a year in advance. At this writing (Feb. 15) the Pro-2008 is only available at a few stores, but should be readily available by mid-March. The unit operates on 120 v. AC, 9-v. battery not included. The price: $259 retail + tax. At this price the unit should sell quite well as an introductory model.

And, finally, to quash any further rumors concerning Radio Shack's intentions, Radio Shack is not comming out with any type of Aircraft Scanner, their marketing "experts" have determined that there is no market for such a product according to Rich Hollander, District Manager for the Peninsula. (Hmm, I guess they've never heard about Bearcat!)

Gary J. Mondfrans,
San Bruno, California

PRO-2008 PROGRAMMABLE SCANNER FROM RADIO SHACK
by Bob Grove

Federal Government monitoring buffs will be interested in the newest entry into the programmable field by Radio Shack. It is definitely no-frills fare, but has one superlative feature: 410-512 MHz continuous UHF coverage! With the previous experience of Treasury Department discouragement reportedly brought upon both Regency and Electra, it will be interesting to note official reaction to this unit!

The PRO-2008 has only 8-channel capability, and no search. It is equipped for AC-power operation only; no mobile. It is small (about the size of the BC-210), wood-grain finish, sloping black panel, and chrome knobs. It has a front-panel speaker with an earphone jack for privacy. A 9-volt battery is required as a back-up for the volatile memory chip. A brilliant fluorescent display clearly announces frequencies. Scan rate is stated as 10 channels per second; our sample was closer to 8. Sensitivity is not good, but it is adequate for metropolitan listening: 1 microvolt VHF, 2 microvolts UHF. You will definitely notice the difference in signal strength when comparing the 2008 with a more expensive receiver.

Selectivity is quite good. The IF stages use one crystal filter and one

ceramic filter for dual conversion, (10.7 MHz and 455 kHz); IF bandwidth is ± 9 kHz (-6 dB) and ± 17 kHz (-50 dB). Spurious signal rejection is down 50 dB on both VHF ranges, but unspecified on UHF. Squelch sensitivity is better than 1 microvolt for 30 dB signal-plus-noise/noise.

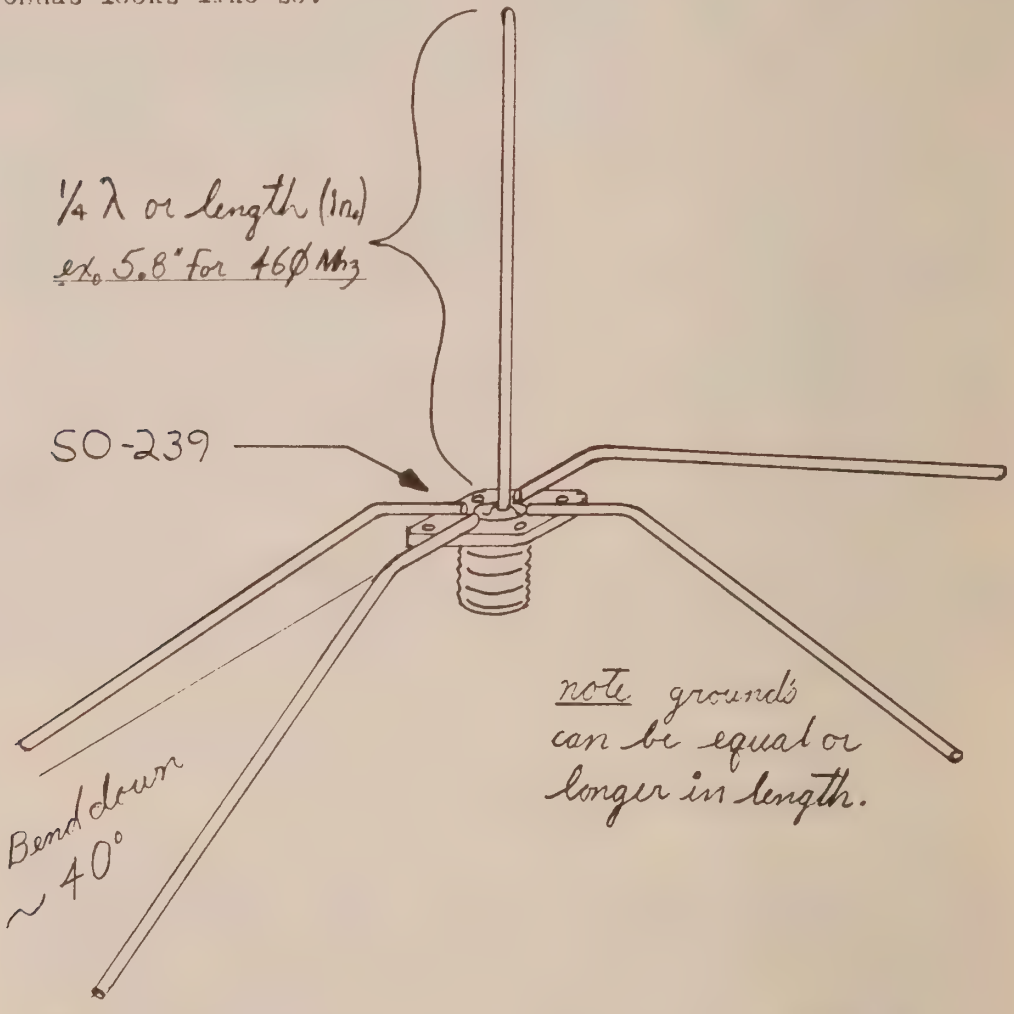
Other features include individual channel lockout, programmable 3-second delay, a "clear" button to remove an erroneous entry, and simple antenna input for all ranges.

Weighing in at 5 pounds, the PRO-2008 is a good value, especially considering its 410 MHz low-end UHF coverage. Naturally, discrete frequencies have to be entered in the absence of a search feature, but this is the tradeoff for extended UHF coverage in the present marketplace.

From Bryan CA OR 097

For those interested in building an antenna I have just the answer. If you have, or can get ahold of a soldering gun, about 400 watts, solder, flux, file, screw-driver, wrench; your in business.

The Marconi 1/4 wave ground plain is the builders answer. The antennas looks like so:



The 4 ground plain wires are not critical in the making of these antennas. One should try to keep the ground plains longer than the vertical.

Ok, now the tuned part. The length of this element determines what one is receiving best. For these frequencies use the formulas or see examples below.

1. Aircraft 121 MHZ center of band 23 inches.
2. Police, etc. 154 MHZ try a shorter rod of 18 inches.
3. Government 169 MHZ goes about 16.5 inches.
4. 460 MHZ build to 5.8 inches long.

The mathematical formula is 2731 divided by frequency (MHZ) equals length (inches) for VHF. For UHF use 2627 divided by frequency (MHZ) equals length (inches).

VHF formula $\frac{2731}{\text{freq. (MHZ)}} = \text{Lg.(in.)}$

UHF formula $\frac{2627}{\text{freq. (MHZ)}} = \text{Lg.}$

The Radio Shack has the SO-239 part No. 278-201 for about a dollar. (see drawing)

The rod is brass or some other easily solderable metal. I found welding rods up to lengths of 3 feet which would work at 78 MHZ. The UHF frequencys are shorter so the model R.R. shops will have brass in 6" lengths. Hardware or model airplane shops are good sources.

My antennas are running me about two dollars and a hours worth of time to install. The installation can go in an attic. For better results you can install outside at a higher level. The coax (RG8U) foam type is best for carrying those weak signals to the receiver, especially if you are using over 30 ft. or trying for UHF frequencies.

One note on antenna placement. Avoid level height with AC power lines. Either be above them or just under, but not equal height. Ok!

Have fun and please be safe on that roof, it can be slippery and its a long way down. The power line can be a shocking experience.

Railroads

Ken Fitzgerald, Editor

Send information about railroad frequencies and their uses, radio system details, tips for monitoring railroads, explanations of railroad jargon and related information and questions to: Ken Fitzgerald, P.O. Box 307, Springer, OK 73458.

This month we will explore a relatively new phenomenon in the area of railroad radio--mobile telephones. The majority of medium and large railroad companies in the U.S. operate their own telephone and data transmission systems via microwave or land-line or both. The great distances covered by many railroads makes this investment in communications equipment a more attractive cost than paying for the services provided by the Bell system or other communications businesses.

For example, a Santa Fe employee in Chicago gets out his Santa Fe telephone book, looks up and dials the number of a Santa Fe office in Los Angeles, and his call is completed through the company's private microwave network, without having to pay long distance rates. While mobile telephones for private businesses and individuals have been available through the Bell System or R.C.C. services for quite some time, it has only been in recent years that railroads have adopted this innovation for their own communications systems. Mobile units can access the company telephone system through a mobile operator or by direct dial access to make or receive calls. All mobile PBX's(as they are referred to in-house)I have encountered have repeater modules built-in so that any number of PBX-equipped mobiles within range can participate in a conference call, or simply utilize the PBX as a car-to-car repeater in addition to its intended use.

The first system I will describe in detail is the Santa Fe's, where the original manual access through an operator type of system has been completely replaced by automatic access through the use of a telephone touch pad mounted above the radio control head in each equipped vehicle. Mobile use of the system is limited to operating officials, railroad police, and key maintenance personnel. Due to planning and licensing problems, the Santa Fe was unable to limit its PBX accesses to one or two frequency pairs, resulting in the following five channel assignments (all are not yet in service, and since they function as repeaters, only the first frequency in each output/input pair need be monitored to hear both sides of a call):

"P-1"

160.560/161.490

Chicago, IL
Lemont, IL

"P-2"

160.260/161.490

Dallas City, IL
Newton, KS
Arkansas City, KS
Amarillo, TX
Krider, NM
San Fidel, NM
Sanders, AZ
Williams, AZ
Goffs, CA
Barstow, CA
Los Angeles, CA

"P-3"

160.335/161.460

Kansas City, KS
Topeka, KS
Emporia, KS
Wichita, KS
La Junta, CO
Carnero, NM
Gallup, NM
Winslow, AZ
Yarnell, AZ
Kingman, AZ
Ludlow, CA
San Bernadino, CA
Bakersfield, CA

"P-4"

160.245/161.535

Oklahoma City, OK
Colorado Springs, CO

"P-5"

160.425/161.295

Perry, OK
Dallas, TX

The P-1 through P-5 designations are only for reference by Santa Fe's communications department, and so the actual channel number of each PBX varies in each region(example: Oklahoma City is channel 3 in that area). Office personnel can activate each individual PBX by dialing its special number on any company phone, waiting for a "beep" signal, and then voice-paging the desired unit number or person directly over the radio. Mobiles wishing to make a call must select the proper channel, and then while holding the microphone keyed, punch 1-2-#, after which they will get a dial tone before punching out the specific number they want on the touch pad. Once a PBX is activated and a call is attempted or completed, it is the responsibility of the mobile unit to disconnect or "bring down" the PBX by keying the mike while punching 1-3-#. If the PBX is "up" and no voice transmission takes place for two minutes, then a sequence of sixteen on-the-air beeps begins, after which the PBX shuts itself off if no more usage occurs before the last beep.

Southern Pacific and its subsidiary railroad company--St. Louis Southwestern(more familiarly known as the "Cotton Belt")--has a mobile PBX system which relies on manual access through a mobile operator, and is not limited to use by officials and other specific vehicles. Everything on rubber tires in the supervisory and maintenance fleets is PBX equipped, along with many of the hand-helds used by officials. Channel 1 over the entire length of both the Southern Pacific and Cotton Belt systems is the "road" channel--161.550 mhz--which is installed in all base stations, locomotives, cabooses, and hand-helds along with all mobile units.

Channels 2 and 3 over the length of both systems are PBX channels for mobile units only, and radio transceiver access points are mounted on the company's existing microwave relay towers, around 50 to 60 miles apart to provide total coverage over the whole railroad. As before, the PBX's function as repeaters, so only the first or output frequency in each channel pair that follows need be monitored to hear both sides:

Cotton Belt system channel 2 mobile PBX ---------- 160.680/161.400

Cotton Belt system channel 3 mobile PBX ---------- 160.800/161.490

Southern Pacific system channel 2 mobile PBX -------- 160.890/161.040

Southern Pacific system channel 3 mobile PBX -------- 160.950/161.160

Southern Pacific channels 2 and 3 are used over the whole S.P. system in Oregon, California, Arizona, New Mexico, Nevada, Utah, and Texas, except between Houston and New Orleans--where Cotton Belt channels 2 and 3 are used due to licensing conflicts, in addition to their normal usage on the C.B. between Corsicana, Texas and St. Louis, Missouri, via Arkansas and the extreme southern tip of Illinois. The use of either channel 2 or 3 at each PBX transceiver location is alternated, such that if the PBX input on a certain tower requires the mobile unit to be on channel 2 to access it, then the next PBX transceiver about 50 miles down the line will require the use of channel 3; the next access point 50 or so miles beyond that will be back to channel 2 again, and so on over the whole railroad. This spacing allows better utilization of the network since any one mobile unit using a channel is less likely to interfere with another mobile unit using the same channel two access points down the line for a different phone call.

Company telephone books are carried in all vehicles which tell the user whether to set his radio on channel 2 or 3, depending on what area he is in and what PBX transceiver he is closest to. The user then keys his mike for five seconds and then releases it, after which an operator should come on the air and ask for the company telephone number the mobile unit wishes to ring. The operators who complete calls from mobile units control a large number of access points from central locations, which makes it possible for example to sit in Yuma, Arizona, monitoring the PBX radio station at Telegraph Pass on S.P. channel 2, and hear the operator come on and say, "Los Angeles PBX, what number please?" Office-to-mobile unit calls can be completed by dialing directly into the PBX transceiver judged to be closest to the desired mobile unit, and then voice-paging that unit directly over the radio. Once a PBX station has been activated and a call attempted or completed, a carrier will remain on the air on that PBX's channel until the operator gets around to turning that specific transceiver off(which in my experience has sometimes taken several hours). I have a six-page list of all the locations and areas of coverage of the S.P./C.B. mobile PBX system which I will be happy to send any interested member for 60¢ in stamps or coins to cover xeroxing costs, and a SASE.

The Union Pacific's mobile PBX system is more simple to monitor in that it uses only one channel over the whole railroad, composed of the frequencies(once again only the first is needed to hear both sides):

Union Pacific systemwide mobile PBX ---------- 160.290/161.520

The system is used primarily by operating officials and railroad police, and is in the process of switching over from a manual system similar to the Southern Pacific's to an automatic system like the Santa Fe's. It is different from Santa Fe's in that mobile units must punch only "#" to get a dial tone before punching the rest of their desired number; and the PBX is automatically turned off when the phone is hung up on the office end of a call. The Union Pacific has over 100 PBX accesses in operation in California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, Oregon, Utah, Washington, and Wyoming. I have a one-page list of locations available in return for a SASE.

The final system I will discuss in detail is that of the St. Louis-San Francisco(better known as the "Frisco"), which employs a one channel PBX over the whole railroad(as before only the first is needed):

Frisco systemwide mobile PBX ---------- 161.160/160.545

The Frisco's mobile PBX has only five access points--Tulsa, OK; Springfield and Kansas City, MO; Birmingham, AL; and Memphis, TN(although several others, such as Sherman, TX may be added in the future). Usage is primarily limited to officials and railroad police, and access is manual through a mobile operator.

Railroads (continued)

While no locomotives or cabooses on any of these systems is PBX equipped, each railroad's business cars(specially-equipped passenger cars which are attatched to freight or passenger trains in ordet to transport company officials over the railroad for inspections or tours) are equipped to access all PBX's on the railroad instead of just one or two like most mobile units(for example Santa Fe cars are equipped with all five of their PBX channels). Many other railroads such as the Burlington Northern and the Southern have mobile PBX's, but my information on all of these is incomplete, and I hope this month's column will inspire all of you out there to help track them down. Next time around will bring more member contributions and definitions of railroad terms and slang, so hang in there and keep sending in those frequencies and questions!

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CA-LA-251 Dale, Whittier, CA
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As of March 10, 1980

RCMA had 1356 members in 50 states and 11 foreign countries

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IOWA	13	NEW YORK	85	WISCONSIN	13
KANSAS	9	NORTH CAROLINA	12	WYOMING	3

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BERMUDA	1	MEXICO	1	SWEDEN	2
CANADA	43	N. IRELAND	1	NEW ZEALAND	1
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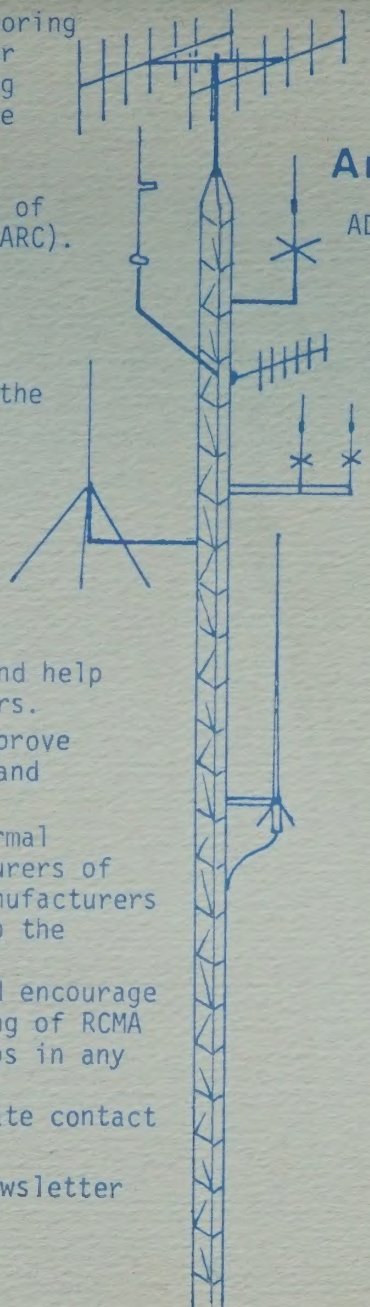
The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications above 30 MHz as a hobby. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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